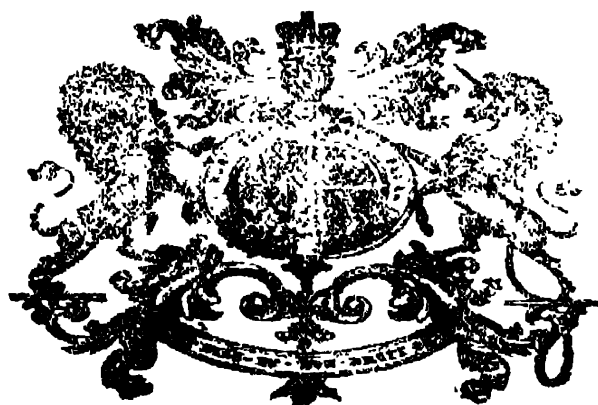


ADMINISTRATION REPORT
ON THE
RAILWAYS IN INDIA
FOR THE
Calendar year 1906

BY
THE RAILWAY BOARD.



Dated the 20th May 1907.

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ADMINISTRATION REPORT

ON THE

RAILWAYS IN INDIA

FOR

THE CALENDAR YEAR 1906.

General.

The Railway Board have included, in this report, for the first time, as Appendix 38-A, a statement of railway and tramway projects, corrected up to the 31st December 1906, with a map illustrating the projects, in substitution of the "Histories of Railway Projects, including Tramways, corrected up to the 30th June," which has hitherto been issued as a separate publication. The object in view in making the change is to provide in one volume for facility of reference all the information of interest to the general public and to possible promoters of railway projects in connection with the investment of capital in, and the working of, Indian railways.

Two other new appendices, *viz.*, 25-A, showing the number of *trains* provided with means of communication throughout between passengers and guards and drivers, and 25-B, showing the number of *carriages* similarly fitted, have also been added to the report.

Appendix No. 4 showing details of the mileage under construction or sanctioned has been reintroduced.

For facility of reference the maps and diagram accompanying the report have been placed in a pocket at the end of the report, instead of being stitched into it as before.

Mileage.

2. During the year 1906, 792 miles of line were opened to traffic, bringing the total mileage open up to 29,097 miles of the following gauges:—

15,548	of	5' 6"	gauge (standard).
12,149	"	3' 3½"	
1,071	"	2' 6"	} (special).
329	"	2' 0"	
<hr/>			
29,097			

There were 981 miles of line sanctioned during the year—

799	of	5' 6"	gauge (standard).
182	"	3' 3½"	(metre).
	"	2' 6"	} (special).
	"	2' 0"	

981

Up to the end of March 1907 the mileages were—

Lines open	:	:	:	:	:	27,303
Lines under construction and sanctioned	:	:	:	:	:	3,150

Capital.

3. The actual capital outlay (excluding premia for the purchase of companies' lines) from the commencement, on all open lines and lines partly open, amounted at the close of the calendar year 1906 to Rs. 37,920 73 lakhs, and that on lines wholly under construction to Rs. 493 16 lakhs. In addition Rs. 96 63 lakhs were incurred on miscellaneous items (English stores, etc.) connected with railways. The total outlay amounted to Rs. 38,513 82 lakhs, as detailed in Appendix S.

4. All sanctions for expenditure are given with reference to the official year, and

the sum of Rs. 1,350 lakhs (£ 9,000,000) has been provided for 1907-1908 divided as under :—

	Rs. Lakhs.
(a) For open lines, including Rs. 568 lakhs for rolling-stock .	1,018.24
(b) For lines already under construction—	
(i) begun prior to 1906-1907	267.93
(ii) begun during 1906-1907	68.83
(c) For lines to be begun in 1907-1908 . . . . .	...
TOTAL .	1,350.00

Rolling-stock and safety appliances.

5. In 1906, 230 engines, 791 coaches and 4,316 wagons were added to the rolling-stock of the railways, and there are under supply 414 engines, 1,797 coaches and 8,733 wagons.

Subsequent to the 31st December 1906 the provision of 65 engines, 144 coaches and 2,888 wagons has, in addition, been authorized.

6. Four hundred and three engines, 990 coaches and 2,460 wagons were fitted with automatic brakes, bringing the total number so fitted at the close of the year up to 3,419 engines, 12,191 coaches and 6,258 wagons, as against 2,626 engines, 8,862 coaches and 109,078 wagons not fitted.

7. One thousand three hundred and nine vehicles were fitted for gas and electricity, making the total number so fitted at the close of the year 11,739, as compared with 6,784 not fitted. The number fitted for gas was 10,204 and for electricity 1,535.

8. Means of communication between passengers and guards and drivers are fitted to many fast trains, both State and Company, and their more extended use is being pressed on all lines. Appendices 25-A and 25-B show the number and class of trains and carriages on certain railways which are so fitted.

9. One hundred and nineteen stations were fitted with apparatus for interlocking points and signals, and 200 with automatic instruments for signalling trains between stations.

Statistical results of working.

10. With an addition of 792 miles to the open mileage, the gross earnings of all Indian railways during the calendar year 1906 amounted in round figures to Rs. 4,411.73 lakhs, compared with Rs. 4,168.09 lakhs in 1905, an increase of Rs. 243.64 lakhs. Of the increase in the gross earnings, Rs. 206.74 lakhs were absorbed in additional working expenses. The net earnings amounted to Rs. 2,210.99 lakhs, against Rs. 2,174.09 lakhs in 1905, or an increase of Rs. 36.90 lakhs. These net earnings yielded a return on the Capital outlay (Rs. 37,920.73 lakhs) on open lines and lines partly open of 5.83 per cent., as compared with 5.92 in 1905.

Of the increase of Rs. 243.64 lakhs in the gross receipts, the East Indian railway earned Rs. 46.61 lakhs or 19 per cent., the North Western (State) and Eastern Bengal (State) railways Rs. 43.63 lakhs, and 43.34 lakhs, respectively, or 18 per cent. each, and the remainder was contributed principally by the Bengal-Nagpur, Bengal and North-Western, Great Indian Peninsula and Oudh and Rohilkhand (State) railways.

The development of passenger traffic, noticed in the last report, continued during the year under review, and a larger number of pilgrims, native marriage parties, visitors to fairs, etc., was carried by railway. The visit to India of Their Royal Highnesses the Prince and Princess of Wales and the holding at Calcutta of an Industrial Exhibition also contributed to this development. The total number of passengers carried was 271.06 millions against 248.16 millions, and the earnings therefrom amounted to Rs. 1,368.31 lakhs against Rs. 1,273.83 lakhs. The number of third class passengers carried was more by 20.98 millions and the earnings therefrom by Rs. 84.72 lakhs. The other classes also showed satisfactory increases. Of the increase of Rs. 91.48 lakhs in the passenger receipts, the East Indian railway earned Rs. 14.47 lakhs or 15 per cent., and the remainder was contributed principally by the Great Indian Peninsula, North Western (State), Eastern Bengal (State), Bengal-Nagpur, Oudh and Rohilkhand (State) and Rajputana-Malwa railways.

The average rate charged to passengers of all classes was 2.46 pies per mile, just over $\frac{1}{4}$ th of a penny, and the average distance travelled was about 40 miles. There have been no material fluctuations in these figures since 1884.

The aggregate tonnage of goods lifted during the year 1906 was 58.87 million tons and the earnings therefrom were Rs. 2,759.69 lakhs, an improvement

over the previous year of 3·93 million tons and Rs. 138·98 lakhs. Of the increase in the goods receipts the East Indian railway earned Rs. 35·11 lakhs or 25 per cent., the North Western (State) railway earned Rs. 28·81 lakhs or 21 per cent., and the remainder was contributed principally by the Eastern Bengal (State), Bengal-Nagpur, Bengal and North-Western and Bombay, Baroda and Central India railways.

The total weight of the traffic in "Grain and pulse", "Cotton, raw and manufactured", "Coal", "Oil-seeds", "Sugar", "Salt", and "Jute" during the year 1906 amounted to 30·95 million tons and the earnings therefrom to Rs. 1,777·04 lakhs, against 28·78 million tons and Rs. 1,712·68 lakhs, respectively, in the previous year. The traffic in these commodities amounted during the year 1906 to 70·27 per cent. in weight and 68·90 per cent. in earnings of the total traffic carried for the public, against 70·63 per cent. and 70·13 per cent., respectively, in the previous year.

There was a large increase of 995 thousand tons and Rs. 47·76 lakhs in the grain and pulse (other than wheat) traffic, attributable chiefly to the larger movements of grains owing to scarcity prevailing in Eastern Bengal and Assam. There were also increases of 276 thousand tons, and Rs. 36·14 lakhs under sugar, due to heavier imports of foreign sugar at Calcutta and Karachi, and of 502 thousand tons and Rs. 26·83 lakhs under metal, due to larger consignments of machinery, etc., booked from Bombay to up-country stations and to heavier despatches of manganese and other ores. The wheat traffic, however, showed a falling off of 314 thousand tons and Rs. 46·34 lakhs, due to decreased bookings to Karachi for export to Europe, and the raw cotton traffic of 107 thousand tons and 28·61 lakhs, due to smaller bookings to Bombay, owing to the partial failure of crops up-country.

Coal.—During the year 1906 the total output from the collieries in India and Burma amounted, as shown in Appendix 28, to 9·26 million tons, against 8·42 million tons in 1905. The exports of Indian coal to Indian ports, principally from Calcutta to Bombay, Karachi and Madras, rose from 1·64 million tons to 1·83 million tons or by 196 thousand tons, and those to ports outside India, including Burma, principally from Calcutta to Rangoon and Ceylon, from 1,114·68 thousand tons to 1,394·73 thousand tons or by 250·05 thousand tons. The imports of coal from the United Kingdom increased from 147·76 thousand tons to 199·21 thousand tons or by 51·45 thousand tons, while those from other countries decreased from 50·02 thousand tons to 27·15 thousand tons or by 22·87 thousand tons.

The total quantity of Indian coal consumed by railways during the year 1906 increased, as shown in Appendix 27, from 2·67 million tons to 2·88 million tons or by 210 thousand tons, and the amount of foreign coal consumed from 18·23 thousand tons to 37·28 thousand tons.

The improvement in the traffic in coal carried by railways was due principally to the increase of 183·56 thousand tons and Rs. 16·69 lakhs recorded by the Bengal-Nagpur railway, owing to heavier traffic from the Sanctoria and Jharia coal-fields to Calcutta for shipment. On the East Indian railway the quantity carried increased by 342·46 thousand tons and the earnings by Rs. 13·81 lakhs, due to larger despatches for foreign railways and for private factories.

The average rate for all descriptions of goods carried per ton per mile was 5·42 pies as compared with 5·19 pies in 1905, or just under $\frac{1}{2}$ penny, while the average distance over which a ton of goods was carried was 166 miles against 177 miles in the previous year.

The additional mileage worked, the larger traffic handled and the increase in the train-mileage run necessitated a corresponding increase in the working expenses. Large sums were also expended by the principal railways in renewing their permanent-way and rolling-stock, and in strengthening bridges, and as a consequence the railways were worked during 1906 at 49·88 per cent. of gross earnings, against 47·84 per cent. in the previous year.

Financial results to the State.

11. The financial result of the working of the State and Guaranteed railways for the year 1906 was a net gain to the State of 247·52 lakhs of rupees, after meeting, in addition to the expenses of working, all charges for interest on Capital outlay by the State and on Capital raised by Companies, and also the annuity payments for railways purchased by the State, including both interest and the portion that represents redemption of Capital. This is the seventh year in succession in which there has been a surplus.

In the subjoined table, which gives details of the charges against Revenue for the year 1906 in comparison with the two preceding years, the ordinary interest

charges are first deducted, and, on this basis, *i.e.*, after excluding the portion of the annuity payments representing redemption of Capital, Rs. 101.66 lakhs, the surplus to the State for the year 1906 amounts to Rs. 349.18 lakhs. It is to be noted that even this understates the real surplus derived from the railways open to traffic, as the interest charges include the interest on outlay on lines under construction, which, if these lines were being constructed by private enterprise, would be charged to the Capital account.

	1904.			1905.			1906.		
	State railways.	Guaranteed railways (Madras and Bombay, Baroda and Central India)	Total.	State railways.	Guaranteed railways.	Total.	State railways.	Guaranteed railways.	Total.
REVENUE.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Gross traffic receipts.—State railways	32,91,95,649	—	32,91,95,649	34,10,08,300	—	34,10,08,300	33,21,19,293	—	33,21,19,293
Gross traffic earnings.—Guaranteed railways.	—	3,16,88,627	3,16,88,627	—	3,32,09,021	3,32,09,021	—	1,63,31,871	1,63,31,871
Repayment of advances of interest.—Subsidiary railways	7,22,765	—	7,22,765	6,41,787	—	6,41,787	8,89,164	—	8,89,164
TOTAL REVENUE	32,99,17,774	3,16,88,627	36,15,90,701	34,10,50,036	3,32,09,021	37,79,19,117	33,33,08,457	1,63,31,871	39,00,10,328
EXPENDITURE.									
Working expenses.—State railways	15,52,67,601	—	15,52,67,601	16,68,14,272	—	16,68,14,272	18,99,38,725	—	18,99,38,725
Working expenses.—Guaranteed railways	—	1,59,28,180	1,59,28,180	—	1,65,39,810	1,65,39,810	—	1,04,84,000	1,04,84,000
Share of surplus profits paid to Companies, etc.	40,09,066	18,91,136	65,01,102	47,06,603	26,07,049	75,09,652	55,71,644	9,05,248	64,76,892
Land and Superannuation charges.—Guaranteed railways	—	—1,16,721	—1,16,721	—	5,80,468	5,80,468	—	—4,02,066	—4,02,066
Land and subsidy charges	7,58,615	—	7,58,615	1,51,931	—	1,51,931	6,82,316	—	6,82,316
Miscellaneous railway expenditure	8,73,005	—	8,73,005	—2,13,051	—	—2,13,051	7,29,781	—	7,29,781
Total expenditure	16,14,15,667	1,77,01,245	17,91,16,912	17,19,30,055	1,67,29,355	19,10,59,410	19,59,23,086	1,09,87,851	20,69,10,937
Net Revenue	16,84,72,107	1,39,87,382	18,23,60,489	17,27,20,041	1,65,00,666	18,02,49,707	18,73,85,371	53,44,020	19,27,29,411
COMPANY INTEREST CHARGES									
Interest on Capital outlay.—State Railways	5,17,24,417	—	5,17,24,417	5,16,09,721	—	5,16,09,721	6,08,63,193	—	6,08,63,193
Interest on debt for purchase of railways	1,77,75,682	—	1,77,75,682	1,71,45,255	—	1,71,45,255	2,19,70,715	—	2,19,70,715
Interest on advances of Capital to Companies	65,22,558	—	65,22,558	73,33,124	—	73,33,124	75,88,954	—	75,88,954
Interest on Capital raised by Companies	1,88,00,043	—	1,88,00,043	1,95,36,392	—	1,95,36,392	2,06,46,584	—	2,06,46,584
Portion of annuities in purchase of railways representing interest on Capital	3,56,19,735	—	3,56,19,735	3,53,61,300	—	3,53,61,300	3,50,87,916	—	3,50,87,916
Interest on Capital of Guaranteed Companies	—	1,60,16,970	1,60,16,970	—	1,60,85,806	1,60,85,806	—	1,17,08,570	1,17,08,570
Total Interest	13,05,19,335	1,60,16,970	14,65,36,305	13,49,90,792	1,60,85,806	15,00,76,598	14,81,12,665	1,17,08,570	15,78,11,235
Surplus of net Revenue over Interest	3,79,53,352	—21,29,328	3,58,24,024	3,87,29,249	—25,16,140	3,02,13,109	4,12,82,726	—63,64,560	3,49,18,176
Portion of annuity payments representing redemption of Capital also charged against Revenue	95,01,700	—	95,01,700	96,28,285	—	96,28,285	1,01,66,475	—	1,01,66,475
Actual net gain +, or loss—	+2,84,51,652	—21,29,328	+2,63,22,324	+2,80,00,964	—25,16,140	+2,63,84,824	3,11,16,251	—63,64,560	2,47,51,701

* Includes the following sums adjusted in connection with the Bombay, Baroda and Central India Railway which became a State line with effect from 1st January 1906 :—

Gross traffic earnings	...	Rs. 13,29,625	Surplus profits	...	Rs. 7,80,248
Working expenses	...	16,71,816			

Net receipts ... —2,42,291

† Includes interest on the Bombay, Baroda and Central India Railway Capital amounting to Rs. 36,71,850

12. As regards an account of the Capital liability in connection with railways owned by the State, there are some complications in stating the amount, owing to the fact that, in the case of some of the lines taken over, the purchase price is being paid by means of annuities. In these cases it seems correct to deduct from the original commuted Capital at which the lines were taken over, the amount redeemed by annuity payments up to date. On this basis the subjoined table shows the Capital liability at the end of 1906 on account of all railways classed as State railways; the State outlay, as recorded in rupees in the accounts being converted into sterling at the rate of Rs. 15=£1. The total Capital amounts to £273·12 millions (the details by railways being shown in Appendix 9); and on this the net revenues of the State railways for 1906, £12·49 millions, give a return of 4·57 per cent. The Capital of the Madras (old Guaranteed) railway amounts to £12·65 millions and on this the net earnings of the railway for 1906, £121·41 thousands, give a return of 3·36 per cent.

Capital liability on account of railways classed as State railways at end of 1906.

1. Share Capital of purchased railways being paid off by annuities :—

	£
Commuted value of stock purchased	85,010,259

Deduct—

Commuted Capital representing annuities which were purchased by creation of debt (liability included under item 3)	12,751,190
New stock of the Great Indian Peninsula railway exchanged for portion of annuity (liability included under item 5)	1,750,000
Capital redeemed by annuity payments	5,811,182
	<hr/>
	20,318,372

Net outstanding	64,691,857
2. State outlay	102,280,494
3. Debt incurred for purchase of railways	47,087,298
4. Capital advanced by Government to Companies	16,011,377
5. Capital raised by Companies on the Secretary of State's guarantee (including overdrafts of Capital)	43,069,746
	<hr/>
TOTAL CAPITAL LIABILITY	273,120,802

Capital liability on account of Guaranteed railways at end of 1906.

Capital raised on the Secretary of State's guarantee, including overdrafts :—

	£
Madras railway	12,647,953

Rates and fares.

COACHING.

13. The Bengal-Nagpur railway introduced "week-end" return tickets at single fares from Howrah to all stations, and from certain principal stations to Howrah. The Company also reduced from 2½ to 1½ pies per mile the return 3rd class fare for coolies from stations between Chattipur and Vizagapatam on the Khargpur-Waltair section to Howrah, to encourage the emigration to Calcutta of unskilled labour, and made the same reduction in the lowest class fare over the Parlakimedi Light railway to attract to the railway passengers who, it was noticed, continued to walk in large numbers.

The East Indian railway issued 3rd class return tickets at 1½ fares to *bona fide* exhibitors, artisans and agriculturists, etc., attending the Indian Industrial Exhibition held in Calcutta, and return tickets of all classes for a single fare to visitors to the Exhibition from suburban stations, Burdwan and below, to Howrah. To

facilitate the supply of cooly labour to the tea gardens in Assam, the 3rd class fares between *viâ* Naihati and all stations distant 100 miles and over from Naihati junction were reduced to $1\frac{1}{2}$ pies per mile, for traffic to and from Chandpur and stations *viâ*, and return journey tickets between stations on the Bengal Dooars and Bengal-Nagpur railways were issued to coolies employed in the tea gardens situate in the Dooars, at the reduced charge of $1\frac{1}{2}$ fares for the double journey between *viâ* Sahebgunge and Asansol and *viâ*. Third class return tickets at $1\frac{1}{2}$ fares for the double journey were issued during the year to pilgrims and visitors attending *melas* and fares, with a view to attracting to the railway those who continued to use the road.

GOODS.

14. *Coal, coke and patent fuel.*—Revised rates for the carriage of coal, coke and patent fuel, based on the reduced minima and conditions mentioned in paragraph 13 of the Administration Report on the Railways in India for 1905, were introduced in November 1906 on the *North Western, Oudh and Rohilkhand, Eastern Bengal (State), East Indian, Bengal-Nagpur, Bombay, Baroda and Central India, and Great Indian Peninsula railways.*

Concessions on goods to and from Persia.—To develop traffic by the Quetta-Nushki route, the *North Western (State) railway*, with effect from the 15th April, allowed rebate of $\frac{2}{3}$ ds of the actual freight paid on all goods to and from Persia, *viâ* Seistan booked from or to Quetta or Nushki.

Famine traffic.—In consequence of the scarcity of fodder in the Punjab the *East Indian railway* quoted a reduced wagon rate of 2 annas a mile for fodder and forage for stations *viâ* Delhi. For a similar reason the *North Western (State) railway* quoted, between January and July, special reduced rates of 2 annas and 4 annas per mile for ordinary and bogie wagon loads, respectively, for the carriage of *bhoosa* and other fodder over certain sections. Special reduced rates were also quoted by the *Bombay, Baroda and Central India, Gwalior Light, Jodhpur-Bikaner and Oudh and Rohilkhand (State) railways.*

The upward rates for edible grains from Howrah to stations between Chunar and Delhi were reduced, in order to help the movement of food grains from Bengal to the United Provinces where there was a scarcity.

Port to port rates between Madras and Mormugao.—An agreement was come to between the Nizam's Guaranteed State, Southern Mahratta, Madras and Great Indian Peninsula railways on the subject of the port to port rates between Madras and Mormugao.

The *Bombay, Baroda and Central India railway* introduced an all-round terminal charge of 3 pies per maund, at both despatching and receiving stations, in lieu of the various terminal charges previously existing.

With effect from the 1st December 1906 the scale of class goods rates on the Bikaner section of the *Jodhpur-Bikaner railway* was reduced to the same level as that in force on the Jodhpur section.

On the *South Indian railway* owing to the minimum rate of $\frac{1}{16}$ th pie per maund per mile for rice and paddy carried for distances over 350 miles, introduced experimentally in November 1903, having proved successful in opening up and developing new long-lead traffic, the same rate was applied from 1st August 1906 to grain of all kinds.

The *Kalka-Simla railway* made several reductions in goods rates, chiefly for grains, iron and special class goods, in order to draw to the railway the traffic which still continued to use the cart road.

Important measures and events.

15. *Construction of railways in Native States.*—Proposals have been received from the Patiala State for raising capital for the construction of the Patiala-Jakhal railway. The matter is under the consideration of the Government of India.

Communication between passengers and the guard and driver of a train.—The provision of an effective means of communication between passengers and the guard and driver being a matter that seriously affects the safety of the travelling

public, orders were issued by the Railway Board for the adoption on all railways in India of the type of communication now in general use in England. The North Western, Oudh and Rohilkhand and Eastern Bengal (State) railways were instructed to at once provide this means of communication on new and rebuilt stock, and to fit the communication to the existing stock of all classes as rapidly as possible. The work of fitting the existing carriages of companies' railways is, with certain exceptions, required to be completed within two years from the date of the order.

Signalling and interlocking.—Rules for the design and inspection of signalling and interlocking have been compiled and circulated to railway authorities for adoption as a guide to manufacturers in meeting the requirements of railway administrations and to Government Inspectors in passing signalling and interlocking installations put up to ensure safety to traffic. The rules have been included amongst those for the inspection of railways prior to opening.

Revision of the General Rules for working open lines of railway in British India administered by the Government.—The advance in signalling and block working on railways in India necessitated a revision of Part I of the General Rules for working open lines of railways. The work was entrusted to a special Committee composed of officers of the Traffic, Locomotive and Engineering Departments, and a Signal Engineer. The rules framed by this Committee were considered by the Government of India and circulated to railways, and, as a result, a further revised draft was circulated and subsequently placed before the Indian Railway Conference Association for their consideration and recommendations. The recommendations of the Conference having been considered by the Railway Board and the Government of India, a complete and revised set of General Rules was framed and issued in September 1906. The revised rules were to be brought into force on the 1st January 1907, but on the recommendation of the Indian Railway Conference Association, the date of their introduction has been postponed to the 1st July 1907.

Revision of Risk Note forms B. and H.—The object of the revision is to impose a larger measure of liability on railways than exists at present. Revised forms, drawn up under legal advice and accepted by the Indian Railway Conference Association, have, since the close of the year, been sanctioned by the Government of India and published for general information.

Acceleration of the delivery of the Foreign mails in the Punjab.—For the conveyance of the foreign mails a combined postal and passenger train is run every week from Bombay to Umballa. Sanction has been accorded to the extension of the special direct to Lahore, and to the running, when necessary, of a special from Lahore to Jhelum or Rawalpindi. The introduction of the latter service was made with a view to giving a more regular and earlier postal delivery to important places in the Punjab north of Lahore and to the North-West Frontier Province, where the delivery of the inward foreign mails will be accelerated by from 6 to 24 hours.

Rent for telegraph instruments and wires supplied to railways by the Government Telegraph Department.—The period of five years for which it was ordered that an all-round rate of Rs. 4-8 per instrument per mensem should be charged for the rent of telegraph instruments supplied to railways by the Indian Telegraph Department having expired on the 31st December 1905, the Government of India decided in May 1906 that, with effect from 1st January 1906, the rate of Rs. 4-8 per instrument per mensem should continue to be charged for a further period of one year. It has been arranged that the whole question of telegraph rent and maintenance charges shall be discussed by the Director General of Telegraphs and the Accountant General, Public Works Department, at a meeting with the representatives of the Indian Railway Conference Association. The latter will then formulate and submit definite proposals on the subject.

Replacement of the Government Telegraph Department instruments on the East Indian railway by the Company's stock.—On the East Indian railway, the Company have fixed and are now working their own telegraph instruments at stations between Burdwan and Kiul, and are gradually doing so throughout the line, in replacement of instruments hired from the Government Telegraph Department. Telephone instruments are also being provided at all stations to facilitate train working.

Adoption of British standard sections of rails.—The attention of the Government of India having been drawn to the very great variety of rail sections that have been brought into use on Indian railways and the great inconvenience that frequently results from the existence of this diversity, the Railway Board decided in 1905 that the British standard sections of flat-footed rails weighing from 20 lbs to 100 lbs per yard, which have been approved by the Engineering Standards Committee in England, should be definitely adopted on all State-worked railways, and that sections of the same standards for bull-headed rails should also be adopted after the Standards Committee had been consulted about certain modifications in the fishing angle to suit the requirements of Indian railways. The Railway Board, in circulating their decision as to the adoption of the British standard sections of flat-footed rails on State-worked railways, desired that all Indian railways should also adopt them.

Supply of wooden sleepers.—Difficulty having been experienced in meeting, at a reasonable cost, the demands of railways in India for timber sleepers from the forests in India, Mr. Adam, Executive Engineer, State Railway Department, was deputed in 1904 to investigate the question of the supply of sleepers from Australia. His preliminary report was submitted in 1905, and since then his final report has been received on the production in Australia of wood for sleeper purposes. Under instructions from the Railway Board tenders are invited for all kinds of Indian and Australian sleepers for use on State railways, both for open lines and lines under construction.

Incidence of cost of junction works.—The Railway Board have formulated rules to govern the incidence of cost of junction works necessitated by the construction of new railway lines connecting with existing railways.

Electrification of the Nilgiri railway and the Coimoor-Ootacamund extension thereof.—A scheme for working both this railway and extension by electricity has been investigated. The estimate is under consideration.

Indian Railway Conference Association.—A meeting of the Indian Railway Conference Association was held in Calcutta from the 12th to the 17th January 1906, and another in Simla from the 8th to the 24th October 1906.

Strikes.—During the year strikes occurred on the East Indian and the Eastern Bengal (State) railways principally among the subordinate staff. It was, however, possible by special arrangements to carry on the traffic without serious interruption.

Determination of the Southern Mahratta Railway Company's contract.—The Secretary of State served the Company in England, on the 21st of June 1906, with formal notice of his intention to determine, on the 30th June 1907, the contract of the 1st June 1882 and all contracts supplemental thereto.

Contracts executed for the construction and working of railways.—In the Administration Report on the railways in India for the year 1905, reference was made to the determination, by purchase of the Company's line, of the then existing contracts between the Secretary of State and the Bombay, Baroda and Central India Railway Company, and to the temporary working by the Company of the whole of the Bombay, Baroda and Central India railway system, with effect from the 1st January 1906, under an indenture dated the 27th December 1905. In June 1906, an agreement was reached regarding the main conditions forming the basis of a new contract to run for a term of 25 years for the working, by the Company, of the Bombay, Baroda and Central India and Rajputana-Malwa railway systems, subject to the condition that, if on the opening throughout of the Nagda-Muttra railway the working is entrusted to the Company, the Secretary of State shall be at liberty to resume the working of the Rajputana-Malwa railway. This new contract will, when executed, supersede the temporary arrangements embodied in the contract of 27th December 1905.

On the representations of the Delhi-Umballa-Kalka Railway Company it was decided to purchase the Kalka-Simla railway. The purchase of the line by the State was effected from 1st January 1906, and the line was worked under the direct orders of the Railway Board up to the 31st December 1906. It was made over to the North Western (State) railway administration with effect from the 1st January 1907.

On the 27th January 1906, the Rohilkund and Kumaon Railway Company purchased from Government, at cost price, and took over the working of the Kasganj-Soron branch of the Rajputana-Malwa State railway, in terms of an indenture made on the 15th July 1904 between the Secretary of State and the Company.

A consolidated agreement, dated 2nd February 1906, was entered into between the Government of India and His Highness the Maharaja of Kashmir and Jammu, in place of the four agreements which previously existed for the construction and working of the Jammu-Kashmir State railway. The agreement is for a period of five years from 1st January 1903, and is terminable thereafter on six months' notice by either side.

In June 1906, sanction was accorded by Government to the continuance during the year 1906 of the revised agreement, dated 24th January 1905, between the Raja of Parlakimedi and the Bengal-Nagpur Railway Company, for the working of the Parlakimedi Light railway by the Company, and thereafter from year to year until the agreement is determined on any 31st day of December by the issue of not less than three calendar months' previous notice.

On the 13th July 1906, an indenture was executed with the Rohilkund and Kumaon Railway Company for the provision of moneys for capital expenditure on the Powayan Steam tramway and for the acquisition by the Railway Company of interests in the Powayan Steam Tramway Company, Limited, and other matters.

On the 11th September 1906, an agreement was entered into for the working of the Jaipur State railway from Sanganer to Siwai-Madhopur by the administration of the Bombay, Baroda and Central India railway.

In clause 30 of the contract, dated 7th August 1895, between the Secretary of State and the South Behar Railway Company, Limited, it is provided that the net earnings of the Company for each half-year, together with the amount of rebate under clause 29 of the same contract, shall be paid over to the Company. The Company have since agreed to an arrangement by which they will receive, in lieu of the net receipts as provided by clause 30 of the contract quoted, a fixed sum by way of rental at the rate of £30,000 per annum, the East Indian Railway Company agreeing to treat the South Behar railway as a part of their undertaking for the purposes of their principal contract.

On the *Eastern Bengal (State) railway* the through booking of coaching traffic, *viâ* Dhubri Ghat, was established with effect from the 15th May 1906 between stations on the Northern and Behar sections of the line and *viâ*, and the steamer stations of the Assam Service south of Dhubri Ghat.

The *Great Indian Peninsula railway* established a Central Bridge Depôt at Manmad to deal effectively with the reconstruction, strengthening and renewal of bridge work.

The *North Western (State) railway* introduced in March as an experimental measure the running of a steam coach on the Wazirabad-Sialkot branch.

Important works completed.

16. On the *Bengal-Nagpur railway* the alteration of major bridges between Kharagpur and Bauria stations consequent on the doubling of the line; and the relaying of about 22 miles of the Chakardharpur district with 85-lb rails.

On the *Bombay, Baroda and Central India railway* a large scheme involving the reconstruction of the metre gauge arrangements at Delhi with the view of affording adequate facilities for goods traffic; the further extension and raising of the abutment groyne at the Nerbudda bridge; the interlocking and signalling arrangements at the north end of the Ahmedabad yard; the interlocking arrangements with electric control at Bajuva station; an Institute for the Company's Indian employés; and an overbridge at Ajmer carrying a roadway of 40' across four lines of rails with approaches aggregating 1,360' in length.

On the *Eastern Bengal (State) railway* the quadrupling of the line between Kakurgachi and Dum Dum junction; the remodelling of the yard at, and approaches to, Parbatipur junction; and the major bridges on the Gauhati extension over the Godadhar, Silai, Tipkai and Sankosh rivers.

On the *East Indian railway* the reconstruction of the Buckland Road and overbridge at Howrah; the quarry siding near Pakur; the remodelling of the Allahabad station yard for the entrance of the Allahabad-Fyzabad railway; the spur

line between the Main and Jubbulpore lines ; and the marshalling yard between Howrah and Lillooah.

On the *Great Indian Peninsula railway system*, the reconstruction of the Mumbra bridge ; the strengthening of the four 48' span plate girders of the Munair bridge ; the renewal and strengthening of all girders of less than 30' span on the Great Indian Peninsula section ; the renewal of girders of bridges at miles 54-72 and 61-10 on the Dhond-Manmad line ; the new Signalling and Interlocking Workshop at Parel ; the new Goods Depôt at Balinganj (Agra City) ; and the Kirkee Arsenal and Ammunition Factory siding.

On the *Bengal and North-Western railway* the second line of rails between Bachhwara and Barauni junctions ; and the substitution of 10' span girders of new standard type for old and weak ones, on the Tirhoot section.

On the *Burma railways* the relaying of 18 miles of 41½-lb steel track on the main line with 50-lb steel rails, and 14 miles with 60-lb steel rails ; the interlocking of points and signals in the Kemmendine and Insein station yards ; and the installation between those two stations, between Mandalay and Myohaung and between Rangoon and Kemmendine of the " Sykes Lock and Block " system.

On the *Rohilkund and Kumaon railway* the bridge over the Ganges on the Bareilly-Soron extension.

On the *South Indian railway* the renewal, with steel girders 25 per cent. in excess of the 5' 6" gauge standard, of weak girders between Madras and Quilon and on the Trichinopoly-Madura section ; the addition of ten 30' spans to the seven 30' span girder bridge over the Kodamuruti river at mile E-255-3 and the replacement of the girders with steel girders 25 per cent. in excess of the 5' 6" gauge standard ; and flood protective works on the northern portion of the main line and on the Tanjore District Board's railway.

On the *Kalka-Simla railway* strengthening of a number of galleries on account of the introduction of a heavier type of rolling-stock.

Accidents.

17. The following is a statement of accidents of all descriptions to persons, which have occurred during the last five years :—

YEAR.	Passengers.						Servants.						Other persons.														Total all classes.	
	From accidents to trains, rolling-stock, permanent-way, etc.		By accidents from other causes, including accidents from their own want of caution or misconduct.		Total.		From accidents to trains, rolling-stock, permanent-way, etc.		By accidents from other causes, including accidents from their own want of caution or misconduct.		Total.		From accidents to trains, rolling-stock, permanent-way, etc.		Whilst passing over railways at level crossings.		Trespassers.		Suicides.		Miscellaneous, not included in preceding columns.		Total.					
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.		
1902.	127	181	98	289	225	473	37	93	269	364	306	459	13	13	16	8	542	162	108	5	21	26	700	209	1,231	1,141		
1903.	50	116	93	391	143	447	15	95	275	390	290	435	12	7	16	8	510	172	138	5	35	22	711	209	1,144	1,141		
1904.	11	83	105	321	116	404	23	103	250	364	273	467	6	15	23	1	577	186	120	2	41	14	767	218	1,156	1,089		
1905.	3	140	115	356	118	496	15	115	308	462	323	577	5	15	25	4	661	173	134	5	39	23	864	220	1,805	1,293		
1906.	9	194	155	368	164	562	39	148	341	451	380	599	11	22	41	6	823	259	154	9	41	37	1,020	338	1,614	1,494		

There was an increase of 309 and 201 in the total number of persons killed and injured from all descriptions of accidents during 1906, as compared with the previous year.

The total number of persons of all classes killed by causes beyond their control was 59 against 23, and the number injured 364 against 270. Out of a total of 271·06 millions against 248·16 millions of passengers travelling, and of 10,698·09 millions of miles against 9,900·48 millions of miles travelled, 9 pas-

sengers were killed and 194 injured against 3 killed and 140 injured. This gives an average of one fatal casualty in 30·12 millions against one in 82·72 millions of persons travelling, and an average of one in 1,187·57 millions against one in 3,300·16 millions of miles travelled in 1906 and 1905, respectively.

16. The following are particulars of the more serious train accidents:—

Nos. 18 down passenger and 131 up goods trains collided at mile 864 $\frac{7}{8}$, between Sasni and Pali stations, *East Indian railway*, on the 31st January 1906, due to the driver of the goods train running with a wrong line clear message which had been delivered to him by mistake at Sasni. Two passengers and five railway servants were killed and four passengers and two railway servants injured. The rolling-stock and permanent-way were considerably damaged.

No. 133 up goods train and a ballast train collided at mile 80 between Chooadangah and Jayrampur stations, *Eastern Bengal (State) railway*, on the 23rd February 1906, due to the disregard of rules by the station master, Chooadangah. One railway servant and three coolies were injured. The rolling-stock was considerably damaged.

No. 1 up mixed train was derailed at mile 74·3, between Nangalkot and Laksam stations, *Assam-Bengal railway*, on the 29th March 1906, due to the buckling of the road and to the sudden application of the engine brakes on a long non-vacuum braked train. Four passengers were slightly injured. The rolling-stock was considerably damaged.

Nos. 129 up and 130 down goods trains collided at Jadabpur station, *Eastern Bengal (State) railway*, on the 1th April 1906, due to the driver of the latter train running against signals. Two railway servants were injured. The rolling-stock was considerably damaged.

Nos. 24 down and 17 up goods trains collided at Pradhan Khunta station, Jharia branch, *East Indian railway*, on the 13th April 1906, due to the former train running against signals. One railway servant was injured. The rolling-stock was considerably damaged.

Nos. 8 down passenger and 256 down goods trains collided at Memari station, *East Indian railway*, on the 9th May 1906, due to defective signals. Seventeen passengers were injured. The rolling-stock and permanent-way were considerably damaged.

Nos. 14 mail and 4 mixed trains collided near mile 112, between Urampadu and Koduru stations, *North-West line, Madras railway*, on the 11th May 1906, due to neglect of the staff. One passenger and three railway servants were killed and twelve passengers and three railway servants injured. The assistant station master and the guard of 4 mixed were prosecuted; the former was sentenced to ten weeks' and the latter to three months' rigorous imprisonment.

Nos. 8 down mixed and 21 up goods trains collided between Raibag and Chikodi Road stations, *Poona branch, Southern Mahratta railway*, on the 16th August 1906, due to negligence on the part of the assistant station master, Raibag. Five railway servants were injured. The rolling-stock was considerably damaged.

No. 7 up mixed train was derailed at mile 2, chain 13·75, *Deoghur railway*, on the 31st August 1906, due to the too sudden application of the brakes on the engine, and the consequent impact of the following vehicles, which were unbraked, forcing the train off the rails. One railway servant was killed and three passengers were seriously and seven slightly injured. The rolling-stock was considerably damaged.

No. 64 down mixed train was derailed at mile 32·5, between Balaghat and Samnapur stations, *Jubbulpore-Gondia extension, Bengal-Nagpur railway*, on the 15th September 1906, due to the line spreading or buckling owing to creep. One passenger was killed and two injured. The rolling-stock and permanent-way were considerably damaged.

A down locomotive fuel special and an up ballast train collided at mile 52·11, between Lalkua and Motta Haldoo stations, *Rohilkund and Kumaon railway*, on the 23rd September 1906, due to the ballast train, which was working outside the down distant signal at Lalkua, not having been properly protected. One person was killed and twenty-two injured. The rolling-stock was considerably damaged.

Damages by floods and rainfall.

19. On the Jubbulpore-Gondia extension of the *Bengal-Nagpur railway* heavy rain in June breached the line in several places. Large boulders and a quantity of earth, dislodged at a cutting, fell on the line, interrupting traffic for about a week.

Owing to heavy rain between June and August several breaks occurred on the *Bombay, Baroda and Central India railway system*, including one of about a mile in length on the Tapti Valley line. Ballast was washed away in places, leaving the rails and sleepers suspended. Slips on the ghats at No. 4 tunnel on the Malwa section, completely blocked the line with boulders and debris. On the Jaipur railway the river overtopped the parapets of a bridge at mile 145/6 and carried away the approaches on either side, while between Sanganer and Sheodas-pur a serious subsidence of the line occurred over a length of 3 miles.

On August 4th owing to an exceptionally high rise in the Teesta river about three miles of the main line between Haldibari and Mandalghat, on the Northern section of the *Eastern Bengal (State) railway system*, were submerged and badly breached in numerous places and several bridges were damaged; traffic was suspended for four days. Floods of the Ganges and a heavy rain-storm on the 9th August completely submerged the whole of the passenger and goods yards at Goalundo and washed away a portion of the main line in its vicinity. The combined working of traffic was transferred to Belgachhi Ghat, which in turn had to be abandoned on the 21st August, when traffic was suspended, and restrictions of booking continued up to the 3rd of December. Breaches and serious damage to the embankment occurred at places over a length of about 14 miles of the Behar section, between Katihar and Barsoi, from floods in August. Floods and the bursting of the "Lalta-Kuri" bund badly breached the Murshidabad branch in three places and entirely washed away two bridges on the 31st August, resulting in the suspension of the through service till the 7th of November. An unprecedented overflow of the Torsa river caused numerous breaches on the Cooch Behar line, which was submerged to a depth of from 3 to 4 feet; two bridges and two culverts were entirely swept away and several others were seriously damaged, resulting in the suspension of traffic for about a month. On the Gauhati extension several temporary bridges were washed away and the bank breached in many places.

About the end of June floods caused considerable damage to the embankment between Mainpuri and Farukhabad on the Shikohabad-Farukhabad branch of the *East Indian railway*.

On the South-East line of the *Great Indian Peninsula railway* unusually heavy rain in June washed away the return walls of several 15' and 20' arches and scoured out the adjacent banks. In the same month the Agra-Delhi Chord line subsided in places, and the embankment was partly washed away. In July floods in the Lahasi and Andheri rivers damaged the Bina-Baran branch.

On the *Madras railway* heavy rain in January caused floods in the Swarna-muki river, and in another river at mile 71/1, breaching the North-East line for 600 feet. In December the North-East line, between miles 168 and 175, was breached at several places extending over a distance of 6 miles, owing to a cyclonic storm which flooded all the rivers between Nellore and Chinna Ganjam.

In September about 4 miles of the Wazirabad-Khanewal section of the *North Western (State) railway* was under water owing to the overflow of the Ravi and rendered unsafe for the passage of trains for 5 days.

The *Bengal and North-Western railway system* suffered considerable damage from the monsoon. On the Katarnian Ghat branch three 80' girders of the Babai bridge of 10 spans were washed away and the protective works badly damaged. Traffic was interrupted from 4th of August to the 1st of September. The bursting of certain river bunds in Nepal territory interrupted traffic between Parsa and Barhni from the 15th July to the 20th October, while the Jarwa branch of that extension had to be entirely closed between the same dates on account of the heavy rain. Floods in August caused considerable damage to certain bridges and to the permanent-way on the Tirhoot section, resulting in the interruption of traffic for about five weeks between Samastipur and Darbhanga and between Muzaffarpur and Samastipur. On the Sitamarhi branch between Kamtaul and Joglara traffic had to be suspended from the 14th August to the 24th September. On the Khanwa Ghat extension passengers had to be transhipped at Bridge No. 141, mile 207, from the 20th August to the 27th September, and the Bhikna Thoree branch had to be closed during the rains and was not re-opened till the 17th of December.

The *Bengal Doars railway* was badly breached at several places and many bridges were destroyed by floods in August.

On the *Burma railways* owing to a sudden flood in the Doungyu Choung at Wuntho and the overflow of two Irrigation canals at mile 545 and of the Meza river at mile 577, the line was flooded in June and earthwork and ballast were washed away in several places, and the line was carried down the bank. At mile 545 the abutment

of a 20' bridge was underscoured and collapsed, and 130 feet of the south approach of a 40' span girder bridge was washed away. Through traffic was interrupted for about 15 days. In September and October floods submerged the line at places to a depth of from 4 inches to 2 feet, causing numerous gaps. A pier of the Gamon Choung bridge was forced about 6 inches down stream and tilted out of the perpendicular, and the approaches to a few smaller bridges were washed away.

Heavy and continuous rain at the end of June caused the embankments of the Bareilly-Soron extension of the *Rohilkund and Kumaon railway* to sink in places and washed away a culvert of one span 12' arch.

Heavy rain in January, due to a cyclonic disturbance, breached the *South Indian railway* and damaged certain bridges, and in November the bursting of tanks in a neighbouring district practically swept away 2 miles of embankment, averaging 6 feet in height, and damaged three bridges between Katalai and Puliur on the Erode branch.

In June the *Barsi Light railway* was washed away in several places between Barsi Town and Tadwale, and traffic was interrupted for more than a fortnight.

Between the 28th of June and the 16th of September considerable and serious damage was done to the *Kalka-Simla railway* owing to an abnormal monsoon. There were innumerable landslips, the line was washed away or subsided in many places. Traffic was suspended for 36 days.

Railway staff.

20. The total number in railway employ at the close of the year was 479,284, of which 6,850 were Europeans, 9,323 Eurasians and 463,103 Natives. Of the Europeans and Eurasians 13,805 were enrolled as volunteers.

21. The Police force employed for the maintenance of law and order on railways and for the protection of railway property is provided by the Civil Department, the State bearing, except in the case of State lines worked by the State and the old Guaranteed railways, three-tenths and the railways paying seven-tenths of the expense incurred.

22. Every monthly paid employé, who is neither pensionable nor a menial servant, is obliged to be a member of the Provident Fund and is required to subscribe monthly amounts varying on different railways but not exceeding one-twelfth of his salary. At the close of the half-year the railway distributes, as bonus among the depositors, a first contribution equal to one-half of their subscriptions, and a second contribution not exceeding one-half of such subscriptions or one per cent. of net earnings.

23. The Fine Fund is used in the relief of families left in destitute circumstances, and to assist in keeping up schools, recreation clubs and similar institutions.

24. On the larger railways schools are provided and maintained at all centres where the number of children is sufficient to justify the employment of the teaching staff. The fees charged are graduated so as not to press too heavily on the poorer employés. Government, in the Educational Department, allow certain grants towards the maintenance of the schools, and any deficit is made good from the revenues of the railway or from the Fine Fund. Where the number of employés is not large enough to justify the provision of a railway school and there already exists a public or private school in the town, the schooling fees are borne wholly or in part by the railway.

The assistance thus given to employés is much appreciated, and a proper standard of education is ensured by the examination which is conducted yearly by the Government Inspectors of Schools before the grant can be drawn.

The number attending railway schools amounted, at the close of 1906, to 6,898 children and 6,391 apprentices and workmen.

Railway surveys.

25. The following surveys were completed during 1906 :—

By the *Bengal-Nagpur railway* lines on the 5' 6" gauge from (1) Kamptee to Ramtek, 17 miles, (2) Gurumaishini to Sini, 44 miles; on the 4' 6" gauge (3) from Tumsar Road to Katangi, 42.89 miles, including 10 miles of sidings, (4) a reconnaissance survey of the Ghat section between Mandla and Bilaspur, 100 miles, (5) a reconnaissance survey from Gurumaishini Hill to a point between Narsinghur and Chakulia, 35 miles, and (6) a branch from Nainpur to Mandla, 32.14 miles.

By the *Bombay, Baroda and Central India railway* lines on the metre gauge from (1) Idar Road station, the terminus of the Ahmedabad-Parantij railway, to Brahma Khed, 33.91 miles, (2) Dholka to Dhanduka, *via* Fedra, 38.64 miles, with an alternative route *via* Gamph, 41.50 miles, and (3) Agra to Hathras junction, 30 miles. On the 2' 6" gauge from Barwaha on the Rajputana-Malwa railway, to Bodeli, on the Gaekwar's Dabhoi railway, 168 miles.

By the *Eastern Bengal (State) railway* lines on the 3' 3 $\frac{3}{8}$ " gauge from (1) Forbesganj station, on the Debiganj branch of the Behar section, to the Nepal frontier, 7.40 miles, (now under construction), (2) Raugiya station, on the Gauhati extension, to Tezpur in Assam, 72.34 miles, (3) Netrokona to Lengar Bazar in Assam, 50.50 miles, and (4) Kissengunge station on the Behar section, *viâ* Titalia, to Jalpaiguri station, on the Northern section, 63.67 miles.

By the *Great Indian Peninsula railway* lines on the 5' 6" gauge from (1) Balharshah (Bellarpur) to Warangal, by the western route, 184.35 miles, (2) Balharshah (Bellarpur) to Warangal, by the direct route, 118.62 miles, (3) Kurla to Trombay, 5.45 miles, and (4) Kunch-Jalaon-Madhogarh-Junna, 52 miles. On the 2' 6" gauge from Murtazapur to Pilsaon, 131.42 miles.

From Dharmapuri, *viâ* Palakodu, to Bangalore with branch from Palakodu to Krishnagiri, 92 miles, on the 2' 6" gauge, by the *Madras railway*.

By the *North Western (State) railway* lines from (1) Jhang, *viâ* Chiniot, to Sangla, 74.40 miles, and (2) Patiala to Jakhal, 54.35 miles, and (3) Khanpur to Chachran, 23.27 miles, all on the 5' 6" gauge.

By the *Oudh and Rohilkhand (State) railway* for (1) a branch from Rosa, on that railway, to Sitapur, on the Rohilkhand and Kumaon railway, 51.36 miles and (2) a chord line from Cawnpore to Rae Bareilly, 58 miles, both on the 5' 6" gauge.

For a line from Benares to Allahabad, with a branch to Mirzapur, 102 miles, and for linking the Revelganj branch with the Ganges-Gogra Doab lines, including a bridge over the Gogra river at Manjhi Ghat with approaches, 10 miles, on the 3' 3 $\frac{3}{8}$ " gauge by the *Bengal and North-Western railway*.

By the *Assam railways and Trading Company (Dibru-Sadiya railway)* an extension from Talap station to Saikhoa Ghat, 8.52 miles, on the 3' 3 $\frac{3}{8}$ " gauge.

By the *Rohilkhand and Kumaon railway* a re-survey of the Pilibhit-Barmdeo branch, 38.75 miles, on the 3' 3 $\frac{3}{8}$ " gauge.

By the *South Indian railway* from (1) Pollachi, *viâ* Kollengode, to Palghat, 37.68 miles, on the 5' 6" gauge; and on the 3' 3 $\frac{3}{8}$ " gauge from (2) Tiruturaipundi to Vedaraniyam, 20.20 miles, (3) Ammayanayakkanur to Uttamapalaiyam, 61.46 miles, and (4) for the doubling of the line from Madras Beach to Pallavaram, 14.72 miles.

By the *Southern Mahratta railway*, on the 3' 3 $\frac{3}{8}$ " gauge, from (1) Gadag, on the main line, to Yalvigi, on the Harihar branch, 33.58 miles, with the Gold Mine branches from (a) Gadag *viâ* Beldahadi and Nabapur to Kabalayatkatti, 13.65 miles, (b) Nabapur to Sangli, 5.33 miles, and (c) Beldahadi to Hosur, 2.87 miles, and (2) from Satara Road station, on the Poona branch, to Satara City, 10 miles.

For an extension, on the 2' 6" gauge, from Basirhat to Taki and Hosanabad, 8.50 miles, by the *Baraset-Basirhat Light railway*.

For an extension, on the 2' 6" gauge, from Behar to Silao, 10 miles, by the *Bukhtiarpur-Bihar Light railway*.

For an extension, on the 2' 0" gauge, from Autpur to Champadanga on the Damoodur river, 7 miles, by the *Howrah-Amta Light railway*.

26. The following surveys were in progress:—

By the *Bengal-Nagpur railway* the re-survey of the Vizianagram-Raipur railway, 310.62 miles, on the 5' 6" gauge, and a final survey of a line from Maudla to Mungeli, about 123 miles, on the 2' 6" gauge.

By the *Great Indian Peninsula railway* lines from (1) Karwi to Rajapur, 18 miles, (2) Cawnpore to Banda, 1.47 miles, (3) Sonnair to Amraoti, 100 miles, (4) Bori to Hinganghat, 27 miles, and (5) a reconnaissance survey from Bir to Bhopal, 110 miles, all on the 5' 6" gauge.

By the *North Western State railway* lines from (1) Patti to Lodhran, 242 miles, (2) Dhak to Katha, 10 miles, and (3) the Jullundur Doab group of railways, 122 miles, all on the 5' 6" gauge.

By the *Bengal and North-Western railway* from (1) Azamgarh to Goshainganj, 59 miles, (2) Bansdih Road to Maneer Ghat, 13 miles, (3) Chupra to Mashrak, 21 miles, and (4) Muzaffarpur to Darbhanga, Muzaffarpur to Sitamarhi, Darbhanga to Khagaria, and Samastipur *viâ* Rowsara to Padri, aggregating 140 miles, all on the 3' 3 $\frac{3}{8}$ " gauge.

By the *Jodhpur-Bikaner railway* from Degana to Hissar, passing through Didwana, Ladnu, Sujargarh, Ratargarh, Churu and Rajgarh, about 200 miles on the 3' 3 $\frac{3}{8}$ " gauge.

By the *Rohilkhand and Kumaon railway* a branch line from Pilibhit to Shahjahanpur, about 56 miles, on the 3' 3 $\frac{3}{8}$ " gauge.

By the *Kalka-Simla railway* for a proposed tramway along the cart road between the present terminus and the cart stand near the municipal Ganj at Simla.

APPENDIX 1.

List of open lines of Railway at the close of the calendar year 1906 alphabetically arranged, with their lengths, the administrations by which worked, gauge and classification.

NUM- BER.		Name of Railway.	Letters used to denote names of railways.	Railway administration by which worked.	Date of first opening of any portion for traffic.	Gauge.	LENGTH OF RAILWAY, IN MILES, OPEN ON 31ST DECEMBER 1906, UNDER SEVERAL HEADS OF CLASSIFICATION.										REMARKS.
Main head.	Sub-head.						State lines worked by agency of		Guaranteed railway.	Assisted railway.	Unassisted railway.	Lines owned by Native States and worked by agency of			Lines in foreign territory.		
							State railway.	Company.								Native State.	Company.	State railway.
A																	
5	(b)	Agra-Delhi Chord.	A. D. C.	Great Indian Peninsula Ry. Co.	15-11-04	5' 6"	...	125'99	...	...	...	...	...	...	...
2	(g)	Ahmedabad-Dholka	A. D.	Bombay, Baroda and Central India Ry. Co.	23-2-03	3' 3 1/2"	...	...	...	31'50	...	...	...	...	...	Rebate lines.
2	(h)	Ahmedabad-Patan-tij.	A. P.		1-6-97	3' 3 1/2"	...	...	...	64'70	...	...	...	...	...
9	(b)	Amritsar-Patti	A. P. T.	North Western State Ry.	21-9-06	5' 6"	...	...	...	27'10	...	...	...	...	...
11	(a)	Assam Bengal	A. B.	Assam-Bengal Ry. Co.	1-7-05	3' 3 1/2"	...	773'28	...	...	...	...	...	...	...
6	(b)	Azhikal-Mangalore	A. M.	Madras Ry. Co.	21-8-06	5' 6"	...	56'35	...	...	...	...	...	...	...
B																	
24	(a)	Baraset-Basirhat Light.	B. B. L.	Baraset-Basirhat Light Ry. Co.	1-2-05	2' 6"	...	...	...	20'06	...	...	...	...	...	Subsidized by District Board.
25	(a)	Barsi Light	B. L.	Barsi Light Ry. Co.	1-3-07	2' 6"	...	...	...	78'51	...	...	...	...	...	Government land provided free.
22	(b)	Bellary-Rayadrug.	B. R.	Southern Mahratta Ry. Co.	1-7-05	3' 3 1/2"	...	33'35	...	...	...	...	...	...	...
12	(a)	Bengal and North-Western.	B. & N. W.	Bengal and North-Western Ry. Co.	2-1-84	3' 3 1/2"	...	...	...	942'18	...	...	...	...	...	Government land provided free.
13	(a)	Bengal-Dooars	B. D.	Bengal Dooars Ry. Co.	15-1-93	3' 3 1/2"	...	...	...	36'10	...	...	...	...	...	Subsidized by District Board.
13	(a)	Bengal-Dooars Extensions	B. D. E.		20-1-00	3' 3 1/2"	116'56	Government land provided free.
1	(a)	Bengal-Nagpur	B. N.	Bengal-Nagpur Ry. Co.	18-0	5' 0"	...	1,004'51	...	...	...	...	...	...	...
6	(b)	Bezwada Extension	B. E.	Nizam's Guaranteed State Ry. Co.	10-2-89	5' 6"	...	20'58	...	...	...	...	...	...	...
14	(a)	Bhavnagar-Gondal-Jenagad-Portbandar	B. G. J. P.	Bhavnagar Gondal-Jenagad-Portbandar Ry.	20-12-80	3' 3 1/2"	...	...	...	...	344'19	...	...	...	...	Includes 5'23 miles of dock estate and quarry lines.
5	(c)	Bhopal-Harso (British section).	B. I.	Great Indian Peninsula Ry. Co.	1-6-82	5' 6"	...	13'11	...	...	...	...	...	...	...
		Bhopal-Harso (Native State section).			18-11-84	5' 6"	...	...	...	...	44'29	...	...	...
5	(d)	Bhopal-Ujjain	B. U.		11-11-06	5' 6"	...	...	...	...	...	113'47	...	...	...
18	(b)	Bikaner.	J. B. B.	Jodhpur-Bikaner Ry.	9-12-81	3' 3 1/2"	...	...	...	...	245'35	...	...	...	...
5	(c)	Bina-Gonda-Bugah.	B. G. B.	Great Indian Peninsula Ry. Co.	25-9-05	5' 6"	...	...	...	...	...	145'61	...	...	...
22	(c)	Birur-Shimoga	B. S. G.	Southern Mahratta Ry. Co.	1-12-89	3' 3 1/2"	...	...	...	...	...	37'02	...	...	...
2	(a)	Bombay, Baroda and Central India.	B. B. & C. I.	Bombay, Baroda and Central India Ry. Co.	10-2-00	5' 6"	...	504'35	...	...	...	...	...	...	...	Includes 39'23 miles of 3' 1/2" gauge line between Viramgam and Wadhwan.
20	(a)	Bukhtiarporo-Behar Light.	B. B.	Bukhtiarporo-Behar Light Ry. Co.	1-7-04	2' 6"	...	...	...	18'60	...	...	...	...	...	Subsidized by District Board.
15	(a)	Burma	B.	Burma Railways Co.	2-5-77	3' 3 1/2"	...	1,310'15	...	...	...	...	...	...	...
C																	
10	(c)	Cawnpore-Burhwal (metre gauge link).	C. B. M.	Oudh and Rohilkhand State Ry.	21-11-06	3' 3 1/2"	79'01	...	...	...	...	...	...	...	...	Excludes 3'40 miles of the Lucknow-Bareilly railway between Aishbagh and Baliganj, worked over, but includes 16'79 miles of mixed (5' 6" and 3' 3 1/2") gauge line between Burhwal and Bara Banki and 6'50 mile on the Cawnpore Bridge of the Oudh and Rohilkhand State Railway.
3	(d)	Cooch-Bihar	C. B.	Eastern Bengal State Ry.	15-9-93	2' 6"	...	...	...	...	...	...	...	39'80	...	
27	(a)	Cutch	C.	Cutch Ry.	18-5-05	2' 6"	...	...	...	...	11'67	...	...	...	...
D																	
9	(j)	Dandot Light	D. L.	North Western State Ry.	6-7-80	2' 0"	6'18	...	...	...	...	...	...	...	...
35	(a)	Darjeeling-Himalayan.	D. H.	Darjeeling-Himalayan Ry. Co.	23-8-80	2' 0"	...	...	...	61'00	...	...	...	...	...	Subsidized by the Local Government.
4	(b)	Delhi-Umballa-Kalka.	D. U. K.	East Indian Ry. Co.	1-3-91	5' 6"	...	...	...	162'36	...	...	...	...	...	Subsidized by the Government of India.
16	(a)	Deoghur	D.	Deoghur Ry. Co.	23-12-82	3' 3 1/2"	...	...	...	4'70	...	...	...	...	...	Government land provided free.
Carried over							85'78	4,503'67	...	1,542'04	...	891'31	341'10	33'80	...		

APPENDIX 1—contd.

List of open lines of Railway at the close of the calendar year 1906 alphabetically arranged, with their lengths, the administrations by which worked, gauge and classification.

Num-ber.		Name of Railway.	Date of opening of any portion for traffic.	Gauge.	LENGTH OF RAILWAY, IN MILES, OPEN ON 31st DECEMBER 1906, UNDER SEVERAL HEADS OF CLASSIFICATION.										REMARKS.
Main head.	Sub-head.				State lines worked by agency of	Guaranteed railway.	Assisted railway.	Un-assisted railway.	Lines owned by Native States and worked by agency of			Lines in foreign possession.			
					State railway.	Company.					Native State Rsch.	Company.	State railway.		
		D—contd.	Brought forward		65 78	1,563 67	...	1,542 14	...	691 21	341 10	33 00	...		
14	(b)	Dhuleghadia . . .	D. H. R.	Dhuleghadia-Gondal-Junagadh-Patan Railway	1-6-98	3' 3 1/2"	...	...	...	2 083	...	...	...
17	(a)	Dehra-Badli . . .	D. S.	A. S. S. Railways and Trading Co.	Aug. 82	3' 3 1/2"	...	...	17 50	...	...	...	...	Subsidized by Local Government.
		E													
		Eastern Bengal State—													
		Behar, Kaunghat and Northern sections.		24-8 1/2	3' 3 1/2"	132 30	...	...	...	...	...	...	...
3	(b)	British section, Sunderbans and Janghat-Krishnagar and Tee-ta-Koo branches.	F. B. S. M.	18 7 5/8	2' 6"	55 01	...	...	...	...	...	...	...
		Dacca section . . .		4 1/2	3' 3 1/2"	85 01	...	...	...	...	...	...	...
3	(a)	Central, Eastern and Southern sections.	F. B. S.	2-1 1/2	5' 6"	407 0.	...	...	...	...	...	...	...
4	(a)	East Indian . . .	E. I.	15 8 51	5' 6"	2,165 04	...	...	...	...	...	...	...
		G													
2	(a)	Gackwar's Dubboi . . .	G. D.	8 4 7 1/2	2' 0"	...	...	...	...	...	84 4	...	...
2	(b)	Gackwar's Mohana . . .	G. M.	21-3 8 1/2	3' 3 1/2"	...	...	...	...	...	92 63	...	...
2	(f)	Godhri-Purling-Nagda.	G. R. N.	16-1 96	5' 6"	141 14	...	...	...	...	...	...	...
5	(a)	Great Indian Peninsula.	G. I. P.	18 4 1/2	5' 6"	1,561 63	...	...	...	...	...	...	...
22	(a)	Guntakal-Mysore Frontier.	G. M. F.	1-1 1/2	3' 3 1/2"	110 50	...	...	...	...	...	...	...
5	(c)	Gwalior Light . . .	G. I.	2-12 1/2	2' 0"	...	...	...	...	...	183 53	...	...
		H													
19	(d)	Hardwar-Dehra . . .	H. D.	1-1 00	5' 6"	...	32 64	...	...	...	...	...	...	Guaranteed under modern contract.
22	(e)	Hindupur (Yesvantpur-Mysore Frontier).	H.	15-12 1/2	3' 3 1/2"	...	...	...	...	...	51 35	...	...
22	(f)	Hooper-Kodur . . .	H. K.	1-4 05	3' 3 1/2"	46 03	...	...	...	...	...	...	...
36	(a)	Howrah-Amra Light.	H. A.	1-7 97	2' 0"	...	...	37 19	...	...	...	...	...	Subsidized by District Board.
37	(a)	Howrah-Sheakhala Light.	H. S.	2-6 97	2' 0"	...	...	10 75	...	...	...	...	...
8	(c)	Hyderabad-Godavari Valley.	H. G. V.	21-10 1/2	3' 3 1/2"	...	...	...	...	...	391 13	...	...	Includes 5 83 miles of mixed (5' 6" and 3' 3 1/2") gauge line between Hyderabad and Secunderabad over which the Nizam's Guaranteed State railway trains also work.
		I													
6	(f)	Indian Midland . . .	I. M.	10-1 78	5' 6"	809 86	...	...	...	...	...	...	...
		Carried over			1,357 07	9,406 88	32 04	1,076 48	...	612 04	1,154 22	33 00	...		

APPENDIX 1—contd.

List of open lines of Railway at the close of the calendar year 1906 alphabetically arranged, with their lengths, the administrations by which worked, gauge and classification.

Num-ber.		Name of Railway.	Letters used to denote status of railways.	Railway administration by which worked.	Date of first opening of any portion for traffic.	Gauge.	LENGTH OF RAILWAY, IN MILES, OPEN ON 31st DECEMBER 1906, UNDER SEVERAL HEADS OF CLASSIFICATION.										REMARKS.
Main head.	Sub-head.						State lines worked by agency of		Guaranteed railway.	Assisted railway.	Un-assisted railway.	Lines owned by Native States and worked by agency of			Lines in foreign territory.		
							State railway.	Company.								Native State itself.	Company.	State railway.
		J			Brought forward		1,357 07	9,468 58	32 04	1,066 41	...	612 04	1,154 22	33 80	...		
2	(J)	Jampur (Siwal Madhopur).	J. S. M.	Bombay, Baroda and Central India Ry. Co.	10-11-05	3' 3½"	...	...	...	...	...	...	32 19	...	...
9	(c)	Jammu and Kashmir (Native State section).	J. K.	North Western State Ry.	15-3-60	5' 6"	...	...	...	...	...	...	...	15 09	...	The British section of this railway forms an integral portion of the North Western State railway. Includes 3 93 miles of dock estate lines.
14	(c)	Jamnagar	J. N.	Bhavnagar General-Jamnad-Porbandar Ry. (	5-1-07	3' 2½"	...	...	...	...	...	51 21	...	...	...
14	(d)	Jodhpur-Rajkot	J. R.		12-4-04	3' 3½"	16 21	
18	(a)	Jodhpur	J. B.	Jodhpur-Bikaner Ry.	24-6-52	3' 3½"	...	...	...	...	...	163 59	...	...	...
18	(c)	Jodhpur-Hyderabad (British section).	J. H.		18-8-01	5' 6"	...	123 48	Worked by the Jodhpur Bikaner railway. The Native State section of this railway forms an integral portion of the Jodhpur railway.
38	(a)	Jorhat	J.	Jorhat Ry.	15-12-84	2' 6"	31 75	...	...	...	...	...	...	...	...
1	(b)	Jubbulpore-Gondia Extension.	J. G. E.	Bengal-Nagpur Ry. Co.	18-4-03	2' 6"	...	245 05	...	...	...	...	...	...	...
		K															
30	(a)	Kalka-Simla	K. S.	Delhi Umballa-Kalka Ry. Co.	9-11-03	2' 6"	...	50 14	...	...	...	...	...	...	...
21	(b)	Karaikkal-Puram	K. P.	South Indian Ry. Co.	14-3-06	3' 3½"	...	...	...	...	...	...	...	...	14 65	
9	(b)	Kharhalgarh-Kohat Thal.	K. K. T.	North Western State Ry.	25-5-01	2' 6"	91 73	...	...	...	...	...	...	...	...
0	(c)	Kolar Gold-fields	K. G.	Madras Ry. Co.	1-0-14	5' 6"	...	...	...	...	...	...	...	9 58	...	
22	(g)	Kothapur	K. L.	Southern Mahratta Ry. Co.	21-4-01	3' 3½"	...	...	...	...	...	...	20 27	...	...
		L															
17	(b)	Ledo and Tikak-Margherita Colliery	L. T.	Assam Railways and Trading Co.	17-2-84	3' 3½"	...	...	...	...	8 60	...	...	...	...
20	(b)	Lucknow-Rate Ry.	L. B.	Rohilkhand and Kumaon Ry. Co.	12-10-84	3' 3½"	...	277 04	...	...	...	...	...	...	...
9	(d)	Ludhiana Dhuri-Jakhai.	L. D. J.	North Western State Ry.	10-1-01	5' 6"	...	...	...	...	...	...	...	79 65	...	
		M															
0	(a)	Madras	M.	Madras Ry. Co. (	1-7-00	5' 6"	...	...	904 61	...	...	...	...	...	...	Inaugurated under old contract.
0	(d)	Madras (North-East line).	M.N.E.		20-2-91	5' 6"	...	497 19	...	...	...	...	...	...	...	Includes 1 80 miles of mixed 5' 6" and 3' 3½" gauge line between Begwala and Kirtan Block hut and 1 04 miles of 3' 3½" gauge line between Kirtan Block hut and Tadepalli.
		(g)	M. D.	Madras Ry. Co.	18-1-00	2' 6"	...	18 53	...	...	...	...	...	...	...
19	(a)	Morvi	M. R. W.	Morvi Ry.	11-7-86	3' 3½"	...	...	...	...	...	74 04	...	...	...
1	(c)	Mourbhaj	M. B.	Bengal-Nagpur Ry. Co.	21-3-87	2' 6"	...	...	...	...	...	20 70	...	32 41	...	
3	(c)	Mymensingh Jamalpur-Jagannathpur	M. J. J.	Eastern Bengal State Ry.	15-10-09	3' 3½"	...	...	...	53 22	...	...	...	...	...	Rebate line.
22	(b)	Mysore-Nanjangud	M. N.	Southern Mahratta Ry. Co.	1-12-01	3' 3½"	...	...	...	...	...	...	15 00	...	...
22	(a)	Mysore Section (Southern Mahratta).	M. S.		1-2-81	3' 1½"	...	256 23	
		N															
2	(c)	Nagda Ujjain	N. U.	Bombay, Baroda and Central India Ry. Co.	15-7-00	5' 6"	...	...	...	...	...	...	34 32	...	...
0	(c)	Nalgiri	N.	Madras Ry. Co.	15-6-09	3' 3½"	...	16 09	...	...	...	...	...	...	...
0	(a)	Nizam's Guaranteed State.	N. G. S.	Nizam's Guaranteed State Ry. Co.	0-20-74	5' 6"	...	...	...	...	...	...	330 13	...	...	Includes 5 82 miles of mixed 5' 6" and 3' 3½" gauge line between Hyderabad and Secunderabad over which the Hyderabad-Godavari Valley railway trains also work.
9	(a)	North Western State.	N. W.	North Western State Ry.	13-5-01	5' 6"	4,371 71	...	...	...	...	...	...	...	...	Includes 5 03 miles of military line not used for public traffic and 26 28 miles of mixed 5' 6" and 3' 3½" gauge line between Bhatinda and Kot Kapura, over which the Rajputana-Malwa railway trains also work.
		(f)	N. D.		1-1-01	2' 6"	40 25	
		O															
10	(a)	Oudh and Rohilkhand State.	O. & R.	Oudh and Rohilkhand State Ry.	23-4-07	5' 6"	1,212 50	...	...	...	...	...	...	...	...	Includes 10 79 miles of mixed 5' 6" and 3' 3½" gauge line between Burhwal and Bara Banki and 2 69 miles on the Cawnpore Bridge and 1 81 miles of 3' 3½" gauge, between the Oudh and Rohilkhand State railway stationment and the Bengal and North-Western railway city station at Benares.
Carried over							6,108 07	10,903 30	936 05	1,729 70	8 60	1,271 00	1,638 21	129 23	14 65		

APPENDIX 1—concl'd.

List of open lines of Railway at the close of the calendar year 1906 alphabetically arranged, with their lengths, the administrations by which worked, gauge and classification.

Num-ber.			Name of Railway.	Letters used to denote names of railways.	Railway administration by which worked.	Date of first opening of any portion for traffic.	Gauge.	LENGTH OF RAILWAY, IN MILES, OPEN ON 31ST DECEMBER 1906, UNDER SEVERAL HEADS OF CLASSIFICATION.										REMARKS.
Main head.	Sub-head.	State lines worked by agency of						Guaranteed railway.	Assisted railway.	Un-assisted railway.	Lines owned by Native States and worked by agency of			Lines in foreign territory.				
		State railway.									Company	Native State itself.	Company.		State railway.			
			P			Brought forward.		4,105.07	10,905.73	936.05	1,729.70	8.60	1,271.00	1,638.21	129.24	11.06		
2	(k)		Palanpur-Deesa	P. D.	Bombay, Baroda and Central India Ry. Co.	6-11-03	3' 3½"	...	17.28	...	...	...	...	...	...	...	This line is the joint property of Government and the Palanpur Durbar.
1	(d)		Parlakmedhi Light	P.L.L.	Bombay, Baroda and Central India Ry. Co.	1-4-09	2' 6"	...	...	...	...	...	24.02	...	...	
2	(d)		Petlad-Cambay (Anand-Tarapur section).	P.C.A.	Bombay, Baroda and Central India Ry. Co.	5-5-00	5' 6"	...	...	...	...	...	21.50	...	...	
2	(e)		Petlad-Cambay (Tarapur-Cambay section).	P.C.T.		20-6-01	5' 6"	...	...	...	...	...	12.30	...	...	
21	(e)		Pondicherry	P.	South Indian Ry. Co.	15-12-79	3' 3½"	...	...	...	...	...	...	...	...	7.96	
20	(e)		Powayan Light	P.W.L.	Bohilkund and Kumaon Ry. Co.	17-6-00	2' 6"	...	...	...	39.50	...	...	...	...	...	Government land provided free.
			R															
1	(e)		Raipur-Dhamtari	R. D.	Bombay, Baroda and Central India Ry. Co.	10-9-00	2' 6"	...	66.94	...	...	...	...	...	...	...
2	(e)		Rajpura	R.	Bombay, Baroda and Central India Ry. Co.	1-7-07	2' 6"	...	...	...	...	...	37.37	...	...	...
9	(e)		Rajpura-Bhatinda	R. B.	North Western State Ry.	1-11-84	5' 6"	...	...	...	...	...	...	...	107.05	...	
2	(d)		Rajputana-Malwa	R. M.	Bombay, Baroda and Central India Ry. Co.	14-2-73	3' 3½"	...	1,774.30	...	...	...	...	...	...	...	Includes 2.10 miles at Ujjain, 3.07 miles between Agra cantonment and Agra Ex. 1. Bank stations and 6.81 mile between Lahori gate-cabin and Brewery cabin at Felhi, laid on the 5' 6" gauge and 20.28 miles of mixed (5, 6' and 3' 3½") gauge line between Bhatinda and Kot Kapura over which the North Western State railway trains also work.
20	(e)		Robilkund and Kumaon	R. & K.	Robilkund and Kumaon Ry. Co.	12-10-84	3' 3½"	117.87		Subsidized by the Government of India.
			S															
6	(f)		Shoranur Cochin	S. C.	Madras Ry. Co.	2-6-02	3' 3½"	...	...	...	...	...	...	64.75	...	...
4	(e)		South Behar	S. B.	East Indian Ry. Co.	5-7-09	5' 6"	...	...	...	78.76	...	...	...	...	...	Rebate line.
21	(e)		South Indian	S. I.	South Indian Ry. Co.	15-7-01	3' 3½"	...	1,130.00	...	...	...	...	...	...	...
23	(a)		Southern Mahratta	S. M.	Southern Mahratta Ry. Co.	24-3-84	3' 3½"	...	1,042.64	...	...	...	...	...	...	...
9	(f)		Southern Punjab	S. P.	North Western State Ry.	10-11-07	5' 6"	...	...	...	423.33	...	...	...	...	...	} Rebate line
9	(g)		Southern Punjab "Ludhiana" Extension	S. P. E.		10-6-05	5' 6"	155.05		
			T															
21	(d)		Tanjore District Board	T. D. B.	South Indian Ry. Co.	2-4-04	3' 3½"	...	...	...	103.36	...	...	...	...	...
2	(f)		Tapti Valley	T. V.	Bombay, Baroda and Central India Ry. Co.	1-12-78	5' 6"	...	...	...	155.48	...	...	...	...	...	Rebate line.
33	(e)		Tarakeswar-Magra Light	B. P.	Bengal Provincial Light Ry. Co.	7-11-04	2' 6"	...	...	...	...	33.27	...	...	...	...
4	(d)		Tarkessur	T.	East Indian Ry. Co.	1-1-85	5' 6"	...	...	...	22.23	...	...	...	...	...	Government land provided free.
33	(e)		Tezpur-Balipara Light	T. B.	Tezpur-Balipara Light Ry. Co.	9-8-04	2' 6"	...	...	...	20.10	...	...	...	...	...	Subsidized by District Board.
34	(e)		Thaton-Duyanzak Light	T. D.	Thaton-Duyanzak Light Ry. Co.	11-2-85	2' 6"	...	...	...	7.78	...	...	...	...	...	Subsidized by Local Government.
21	(e)		Tinnevely-Qullou (Travancore) (British section).	T. Q. B.	South Indian Ry. Co.	1-6-02	3' 3½"	...	56.48	...	...	...	...	...	...	...
21	(f)		Tinnevely-Qullou (Travancore) (Native State section).	T. Q. N.		1-8-03	3' 3½"	...	...	...	...	...	...	67.98	...	...
13	(b)		Tirhoot State	T. S.	Bengal and North-Western Ry. Co.	1-11-75	3' 3½"	...	614.30	...	...	...	...	...	...	...
6	(d)		Tirupattur-Krishnagiri	T. K.	Madras Ry. Co.	18-9-05	2' 6"	...	35.38	...	...	...	...	...	...	...
			U															
23	(a)		Udaipur-Chitor	U. C.	Udaipur-Chitor Ry.	1-8-05	3' 3½"	...	...	...	...	...	67.30	...	...	...
			V															
2	(e)		Vijapur-Kalol-Kadi	V. K. K.	Bombay, Baroda and Central India Ry. Co.	10-6-02	3' 3½"	...	...	...	...	...	...	41.37	...	...
			W															
23	(c)		West of India Portuguese.	W. I. P.	Southern Mahratta Ry. Co.	17-1-87	3' 3½"	...	...	...	...	...	...	...	...	51.10	
Total mileage of railways open in India and Burma on the 31st December 1906.								5' 6"	5,082.22	7,680.74	936.05	1,026.70	...	...	711.31	201.68	...
								3' 3½"	797.01	7,619.60	...	1,630.08	8.60	1,306.93	814.38	...	73.60	
								2' 6"	187.01	405.34	...	100.43	33.27	32.37	188.68	88.00	...	
								2' 0"	37.93	107.04	183.53	
Total.									5,105.07	15,614.08	936.05	2,865.14	41.77	1,838.80	1,898.10	336.28	73.60	

APPENDIX 2.

Mileage added to the Railway System of India during the calendar year 1906 and the following three months.

NUMBER.		Railway administration to which railway has been added.	Name of owning railway.	Section of line added during 1906.	Date of opening for traffic.	ADDITIONS, IN MILES, MADE TO OPEN MILEAGE DURING 1906.									
Main head.	Sub-head.					Length.					Total mileage added to railway administration.				
						5' 6"	3' 3 1/2"	2' 6"	2' 0"	5' 6"	3' 3 1/2"	2' 6"	2' 0"		
1	(b)	Bengal-Nagpur.	Jubbulpore-Gondia Extension.	Chhindwara to Khirsadoli ..	15th March 1906	16 28
	(c)		Raipur-Dhamtari.	Rajim to Rajim Town ...	13th May 1906	0 73	17 06
2	(c)	Bombay, Baroda and Central India.	Petlad-Cambay (Tarapur-Cambay section).	Cambay to Cambay Bandar.	1st March 1906	1 38	1 38
3	(b)	Eastern Bengal State.	Eastern Bengal State.	Golekganj to Kokrajhar ...	1st February 1906.	...	35 75
	(c)		Myrrensingh-Jamulpur Jagannathganj.	New line laid at Jagannathganj.	1st December 1906.	...	2 53	...	...	...	38 22	...	...	...
4	(a)	East Indian ...	East Indian	Bhongaon to Farukhabad	1st January 1906.	27 06
				Dhanbad to Peharpur ...	6th December 1906.	163 71	...	...	...	...	...	...	...	...
				Ondal to Samthia ...	10th December 1906.	42 94	...	...	...	...	...	...	...	...
				Peharpur to Manpur ...	15th August 1906.	17 42	...	...	...	...	...	...	...	...
				Tetuhazi to Kusunda ...	6th December 1906.	1 59	...	...	...	192 72	...	...	...	...
5	(f)	Great Indian Peninsula	Agra-Delhi Chord.	Kosi to Sankot ...	24th February 1906.	5 95	...	...	...	...	...	...	...	...
			Indian Midland	Remaining portion of the Agra-Baluganj branch.	27th February 1906	1 75	...	...	...	7 70	...	...	...
6	(b)	Madras ..	Azhikal-Mangalore.	Azhikal to Hosdrug ...	21st August 1906.	34 52	...	...	...	...	...	...	...	...
				Hosdrug to Kasaragod ...	1st October 1904.	14 22	...	...	...	...	...	...	...
				Kasaragod to Kumbha ...	17th November 1906.	7 62	...	...	...	...	...	...	...
	(g)		Morappur-Dharmapuri.	Morappur to Dharmapuri	17th January 1906.	...	...	18 53	...	56 36	...	18 53	...	...
9	(a)	North Western State.	North Western State.	Snorkot Road to Sargoda	14th May 1906	168 14	...	...	...	...	...	...	...	...
				Amritsar to Tara Taran ...	21st September 1906.	14 20	...	...	...	...	...	...	...
				Tara Taran to Patti	30th December 1906	13 29	...	...	...	...	...	...	...
	(g)		Southern Punjab "Ludhiana" Extension.	Meer-Leod Ganj Road to Ferozepore City.	10th February 1906.	78 00	...	...	...	208 63	...	...	...
10	(a)	Oudh and Rohilkhand State.	Oudh and Rohilkhand State.	Phaphuan to Mariani ..	18th June 1906	47 51	...	...	...	47 51	...	...	...	...
12	(a)	Bengal and North Western.	Bengal and North Western	Barh to Tulsipur ...	15th January 1906.	...	22 54	...	...	...	...	...	...	...
				Gumari to Jaiwa ...	12th April 1906.	...	9 47	...	...	...	...	...
				Paleza Ghat Shift No 68	1st January 1906	...	0 76	...	...	...	...	...
				Barari to Bhagalpur Kachery.	15th March 1906.	...	3 50	...	...	...	...
	(b)		Tirhoot	Bettiah to Narkatiganj	17th January 1906	...	53 73	...	...	...	...	...	...
				Narkatiganj to Bhukna Thores.	17th February 1906.	...	21 50	...	...	...	81 50	...	...
20	(a)	Rohilkund and Kumaon.	Rohilkund and Kumaon	Baroilly to Soron ...	23th January 1906.	...	55 80	...	...	...	55 80	...	...	...
21	(a)	South Indian	South Indian	Pamban beach to Rameswaram.	1st September 1906.	...	6 95	...	...	...	...	...	...	...
				(d)	Tanjore District Board.	Arantaqui Quarry Branch	25th June 1906	...	8 90	10 85
22	(f)	Southern Maharashtra.	Hospot-Kot-tur.	Ramandrug to Ramana-malai.	1st December 1906.	...	4 97	...	...	...	4 97	...	...	...
23	(a)	Barsi Light ...	Barsi Light	Barsi Road to Pandharpur	2nd December 1906.	...	...	30 21	...	...	...	...	...	...
				Kuslamb to Tadwale ...	1st May 1906	...	...	20 36	...	...	...	50 57	...	
Total mileage added during 1906						...	...	...	...	514 30	191 40	86 16	...	...

APPENDIX 2—concl'd.

Mileage added to the Railway System of India during the calendar year 1906 and the following three months.

NUMBER.		Railway administration to which railway has been added.	Name of owning railway.	Section of line added during 1906.	Date of opening for traffic.	ADDITIONS, IN MILES, MADE TO OPEN MILEAGE DURING 1906.							
Main road.	Sub-road.					Length.				Total mileage added to railway administration.			
						5' 6"	3' 3½"	2' 6"	2' 0"	5' 6"	3' 3½"	2' 6"	2' 0"

MILEAGE ADDED FROM THE 1st JANUARY TO THE 31st MARCH 1907.														
1	(a)	Bengal-Nagpur	Bengal-Nagpur.	Bhojndih to Gomoh	1st January 1907.	25.64	...	...	...		
	(b)		Branch line near Khanoodih	1st January 1907.	1.97	...	...	...			
3	(a)	Eastern Bengal State.	Eastern Bengal State.	Khirsadoh to Barkuhi	21st March 1907.	...	...	5.72	...	27.61	...	5.72	...
5	(a)	Great Indian Peninsula.	Matheran	Neral to Matheran	22nd March 1907.	...	...	...	12.61	...	...	...	12.61
6	(a)	Madras	Madras	Basin Bridge to Washermenpet.	15th March 1907.	1.00	...	...	...		
	(b)		Madras (North East line).	Basin Bridge to Korrukuppetai	15th March 1907.	0.85	...	...	...	1.85	...	...	...
7	(a)	Nagda-Muttra	Nagda-Muttra	Kotah to Baran	20th February 1907.	40.00	...	...	...	40.00	...	...	...
10	(a)	Oudh and Rohilkhand State.	Oudh and Rohilkhand State.	Marichu to Zafarabad	1st January 1907.	10.67	...	...	...	10.67	...	...	...
12	(a)	Bengal and North Western.	Bengal and North Western.	Gorakhpur to Chhitauni Ghat	7th February 1907.	...	60.94	...	...			
	(b)		Tirhoot	Bhaptiahi to Makhana Bazar.	1st March 1907	...	44.33	...	...	...	105.27	...	...
Total mileage added from 1st January to 31st March 1907										...	82.38	105.27	5.72	12.61
GRAND TOTAL MILEAGE OPEN ON THE 31st MARCH 1907										...	15,630.08	12,254.67	1,076.61	342.01

APPENDIX 3.

Total Railway mileage opened for traffic during, and at the end of, each year, and the total mileage opened during the Viceroyalty of each Governor General.

CALENDAR YEAR.	Not mileage added during the year.	Total mileage open for traffic at close of the year.	Total mileage opened during Viceroyalty.	Viceroy.
1853	20	20	169	Marquis of Dalhousie.
1854	51	71		
1855	98	169		
1856	103	272	1,418	Earl Canning
1857	15	287		
1858	140	427		
1859	198	625		
1860	213	838		
1861	749	1,587		
1862	746	2,333	920	Earl of Elgin.
1863	174	5,507		
1864	451	2,958	1,501	Lord Lawrence.
1865	405	3,363		
1866	200	3,563		
1867	366	3,929		
1868	79	4,008		
1869	247	4,255	1,066	Earl of Mayo.
1870	516	4,771		
1871	303	5,074		
1872	295	5,369	1,467	Lord Northbrook.
1873	328	5,697		
1874	529	6,226		
1875	315	6,541		
1876	319	6,860	2,621	Lord Lytton.
1877	460	7,320		
1878	899	8,219		
1879	275	8,494		
1880	668	9,162		
1881	728	9,890	2,469	Marquis of Ripon.
1882	259	10,149		
1883	309	10,458		
1884	1,173	11,631		
1885	652	12,283	2,945	Earl of Dufferin and Ava.
1886	609	12,892		
1887	1,211	14,103		
1888	473	14,576		
1889	1,311	15,887	3,928	Marquis of Lansdowne.
1890	514	16,401		
1891	907	17,308		
1892	507	17,815		
1893	689	18,504		
1894	396	18,900	3,536	Earl of Elgin
1895	647	19,547		
1896	707	20,254		
1897	861	21,115		
1898	925	22,040		
1899	1,483	23,523	6,255	Lord Curzon.
1900	1,229	24,752		
1901	611	25,363		
1902	568	25,931		
1903	1,025	26,956		
1904	609	27,565		
1905	730	28,295	802	Earl of Minto.
1906	802	29,097		

APPENDIX 4.

Mileage under construction or sanctioned at the close of the calendar year 1906, with additions to the 31st March 1907.

NUMBERS.		Railway administration by which being constructed.	Name of owning Railway.	Classification.	Section of line, the construction of which has been sanctioned.	Date construction was sanctioned.	MILEAGE SANCTIONED AND STILL REMAINING TO BE CONSTRUCTED.				REMARKS.
Main head.	Sub-head.						5' 6"	3' 3½"	2' 6"	2' 0"	
1	(a)	Bengal-Nagpur.	Bengal-Nagpur	State line worked by company.	Rheindih to Gomoh	1st November 1901	25.61	...	...	...	Since opened.
					Branch line near Khanoodih.		1.47	...	...	...	Since opened.
					Kumpteer to Rautel	13th August 1906.	14.74	...	...	...	Work commenced.
					Kandri branch	13th August 1906.	2.53	...	...	...	Work commenced.
					Vizianagram to Rautel	26th January 1906.	310.62	...	...	...	Work commenced.
	(b)	Bengal-Nagpur.	Jubbulpore-Gondia Extension.	State line worked by company.	Suni to Gurumaiskini	19th October 1906.	44.00	...	...	...	Commencement of work not authorized. Since opened.
					Khirsadoh to Bar-kuhi.	21th June 1904.	...	...	5.72	...	Work commenced.
					Khirsadoh to Sirgaha.	24th June 1904.	...	...	7.76	...	Work commenced.
					Nainpur to Mandla	23rd January 1901	...	...	32.14	...	Work commenced.
					Gondia to Chanda	26th August 1904.	...	...	118.65	...	Work commenced.
(f)	Gondia-Chanda Extension.	Gondia-Chanda	State line worked by company.	P. un (Bramapuri) to Nae-pur.	16th August 1904.	...	...	63.75	...	Work commenced.	
(g)				Purulia-Ranchi	20th October 1905	...	...	72.28	...	Work commenced.	
				Total		99.50	...	330.30	...		
2	(i)	Bombay, Baroda and Central India	Guekwar's Mohsana.	Native State line worked by company.	Chanasma to Beeh-raj.	15th July 1905	...	16.74	...	...	Work commenced.
					Rherda to Dabhora	16th June 1906	...	7.73	...	...	Work commenced.
					Mannud Road to Haraj.	15th July 1905	...	21.37	...	...	Work commenced.
					Nawal to Siwai Madhopur	2nd December 1907.	...	10.65	...	...	Work resumed.
					Total		...	86.49	...	...
3	(a)	Eastern Bengal State.	Eastern Bengal State.	State line worked by the State.	Kakargachi chord.	19th February 1902	2.25	...	...	...	Since opened.
					Lalgola to Lalgola Ghat	23rd September 1903.	2.75	...	...	...	Work commenced.
					Durgapur Chur line		3.39	...	...	...	Work commenced.
					Forbesganj to the Nepal Frontier	27th June 1905.	...	7.46	...	...	Work commenced.
					Kather to Goda-gari	1th February 1904	...	105.10	...	...	Work commenced.
	(b)	Eastern Bengal State.	Eastern Bengal State.	State line worked by the State.	Kakrajhar to the Brahmaputra river opposite Guhati	21st October 1902	...	115.87	...	...	Work commenced.
					Total		8.79	228.27	...	...
					Agra direct access	22nd May 1905	1.75	...	...	...	Work commenced.
					Barharwa to Katwa	5th March 1903.	99.14	...	...	...	Work commenced.
					Bhagalpur to Bansi	25th February 1905.	31.04	...	...	...	Work suspended.
4	(a)	East Indian ..	East Indian ..	State line worked by company.	Borachuk to Soda-pore	14th July 1905.	4.50	...	...	...	Not commenced.
					Chord line between the East Indian and Oudh and Rohilkhand State Railways near Mughal Sarai	30th November 1905	1.19	...	...	...	Not commenced.
					Ghat line to Dhaluan.	5th March 1906.	1.06	...	...	...	Work commenced.
					Ghat line to Sujimpura.	5th March 1908.	2.50	...	...	...	Work commenced.
					Hooghly to Katwa	23rd June 1905.	65.20	...	...	...	Work suspended.
					Khurga to Hagar	13th January 1904.	38.87	...	...	...	Work commenced.
					Tepoi to Barabeni.	18th September 1906	9.31	...	...	...	Not commenced.
					Mile 170½ from Howrah on the Jharit branch to Chandora.	17th March 1903.	4.16	...	...	...	Work abandoned.
					Total		258.72	...	...	...
					Carried over	...	666.61	314.76	330.30	...	

APPENDIX 4—contd.

Mileage under construction or sanctioned at the close of the calendar year 1906, with additions to the 31st March 1907.

NUMBER.		Railway administration by which being constructed.	Name of owning Railway.	Classification.	Section of line, the construction of which has been sanctioned.	Date construction was sanctioned.	MILEAGE SANCTIONED AND STILL REMAINING TO BE CONSTRUCTED.				REMARKS.
Main head.	Sub-head.						2' 6"	3' 3½"	2' 6"	2' 0"	
5	(a)	Great Indian Peninsula.	Great Indian Peninsula.	State line worked by company.	Brought forward ...	...	666.61	314.76	330.20		
					Kurla to Mazagaon	17th February 1905.	6.87	...	...	...	Work commenced.
					Mahim link	17th February 1905.	1.32	...	...	...	Work commenced.
					Warora to Balharshah.	22nd January 1901.	37.59	...	...	...	Work commenced.
					Sabalgarh to Shimpur	9th February 1901.	...	...	...	66.29	Work commenced.
6	(a)	Madras	Madras	Company's line guaranteed under old contracts.	Neral to Matheran	20th June 1904.	...	...	...	12.61	Since opened.
					Total		45.78	...	...	79.00	
					Basin Bridge Junction to Washermanpet.	11th April 1901	1.00	...	...	...	Since opened.
					Kumbha to Mangalore.	28th June 1903.	20.91	...	...	...	Work commenced.
					Basin Bridge Junction to Korakuppetai.	11th April 1901.	0.85	...	...	...	Since opened.
7	(a)	Nagda-Muttra	Nagda-Muttra	State line worked by the State.	Crossing of the Chambal river to Muttra.	1st August 1905.	199.07	...	...	...	Work commenced.
					Kotah to Baran	26th January 1906.	10.00	...	...	...	Since opened.
					Nagda to the crossing of the Chambal river.	29th November 1904	141.43	...	...	...	Work commenced.
					Total		389.50	...	...	...
					Kacha Garhi to mile 22.50.	11th July 1905.	22.50	...	...	...	Work commenced.
9	(a)	North Western State.	North Western State.	State line worked by the State.	Khushalgarh bridge and approaches.		3.63	...	...	...	Work commenced.
					Lodhran to Khanawal	17th March 1906.	56.59	...	...	...	Work commenced.
					Shahdara to Sangla	15th November 1904.	55.57	...	...	...	Work commenced.
					Shorkot Road to Chichoki.	21th July 1906	130.65	...	...	...	Work commenced.
					Total		268.94	...	28.82	...	
10	(a)	Oudh and Rohilkhand State.	Oudh and Rohilkhand State.	State line worked by the State.	Jullundur to the British Frontier	7th August 1903.	...	...	6.80	...	Commencement of work not yet authorised and question of gauge not finally settled.
					Sultanpur to the British Frontier.	7th August 1903.	...	...	22.02	...	
					Total		268.94	...	28.82	...	
					Balamm to Sitapur	23rd October 1906.	37.12	...	...	...	Commencement of work not authorised.
					Marisahu to Zafarabad.	2nd October 1903.	10.67	...	...	...	Since opened.
10	(a)	Oudh and Rohilkhand State.	Oudh and Rohilkhand State.	State line worked by the State.	Rosa to Sitapur	23rd October 1906.	51.36	...	...	...	Commencement of work not authorised.
					Total		99.15	...	...	...
					Carried over		1619.80	826.51	359.12	79.00	

APPENDIX 4—contd.

Mileage under construction or sanctioned at the close of the calendar year 1906, with additions to the 31st March 1907.

NUMBER.		Railway administration by which being constructed.	Name of owning railway.	Classification	Section of line, the construction of which has been sanctioned.	Date construction was sanctioned.	MILEAGE SANCTIONED AND STILL REMAINING TO BE CONSTRUCTED.				REMARKS.
Main head.	Sub-head.						5' 6"	3' 3 1/2"	2' 6"	2' 0"	
11	(a)	Assam-Bengal	Assam-Bengal	State line worked by company.	Brought forward...	...	1,519'80	326'51	359'12	79'00	
					Akhaura to Ashuganj	22nd May 1905.	...	19'00	...	...	Work commenced.
					Kalaura to the Khoo-sara river.	3rd March 1906.	...	16'00	...	...	Not commenced.
Total							...	35'00	...	...
12	(a)	Bengal and North-Western.	Bengal and North-Western.	Assisted company receiving land only from Government.	Burhwal to Sitapur	26th October 1906.	...	59'79	...	...	Not commenced.
					Daraula to Maharaung.	28th September 1904.	...	3'00	...	...	Work commenced.
					Gorakhpur to Chhitannu Ghat.	31st March 1903.	...	60'91	...	...	Since opened.
					Savan to Thawo	2nd November 1904.	...	17'83	...	...	Work commenced.
	(b)	Bengal and North-Western.	Tirhoot State.	State line worked by company.	Bairagnia to Narkatinganj.	23rd September 1903.	...	58'05	...	...	Work commenced.
					Bhagalpur Kachery to Bhagalpur.	17th January 1905.	...	0'79	...	...	Work commenced.
					Mani to Bhaptiahi	23rd September 1903.	...	60'37	...	...	Portion since opened.
					Narkatinganj to Bagaha.	23rd September 1903.	...	26'24	...	...	Work commenced.
Total							...	18'61	...	...	Work commenced.
15	(a)	Burma	Burma	State line worked by company.	Naikhan to Bogayet	1st June 1906.	...	66'25	...	...	Work suspended.
					Thamling to Malagan.	18th October 1905.	...	6'70	...	...	Not commenced.
					Total						
15	(b)	Burma	Burma Extensions.	State line worked by company.	Henzah to Kyangin	19th April 1904.	...	65'66	...	...	Work commenced.
					Pegu to Martaban	27th November 1903.	...	121'27	...	...	Work commenced.
					Total						
17	(a)	Dibru-Sadiya	Dibru-Sadiya	Assisted company, subsidized by Local Government.	Talap to Sakhoa Ghat.	11th May 1905.	...	8'52	...	...	Work commenced.
20	(a)	Rohilkund and Kumaon.	Rohilkund and Kumaon.	Assisted Company, subsidized by the Government of India.	Lalkua to Kashipur	3rd July 1903	...	36'43	...	...	Work commenced.
					Moradabad to Ramnagar.	3rd July 1903	...	47'69	...	...	Work commenced.
					Total						
21	(a)	South Indian	South Indian	State line worked by company.	Portion of the Ram-eswarum extension.	16th September 1904.	...	3'17	...	...	Work commenced.
					Tangachimadam to Port Amphill	16th September 1904.	...	1'71	...	...	Work commenced.
					Tirupachetty to Sivaganga.	21st April 1899.	...	9'00	...	...	Not commenced.
					Total						
22	(k)	Southern Mahratta.	Bezawada-Masulipatam.	District Board's line	Bezawada to Masulipatam.	20th October 1905.	...	49'17	...	...	Work commenced.
	(l)		Kurnool Road-Kurnool.	State line worked by company.	Kurnool Road to Kurnool.	3rd September 1906.	...	32'00	...	...	Work commenced.
	(m)		Sangli	Native State line worked by company.	Miraj to Sangli Town	1st September 1905.	...	5'77	...	...	Work commenced.
Total							...	87'24	...	...
27	(a)	Cutch	Cutch	Native State line worked by Native State.	Anjar to Bhuj	29th May 1905	...	...	27'38	...	Work commenced.
28	(a)	Dholpur-Bari	Dholpur-Bari	Native State line worked by Native State.	Dholpur to Bari	14th November 1905.	...	...	19'25	...	Work commenced.
29	(a)	Dwara-Therria Light.	Dwara-Therria Light.	Assisted company receiving land only from Government.	Dwara to Maolong	15th May 1902	...	...	13'50	...	Work suspended.
					Maolong to Therria Ghat.	15th May 1902	...	...	6'00	...	Commencement of work not authorised.
					Total						
Carried over							1,519'80	1,121'07	425'25	79'00	

NUMBER.		Railway administration by which being constructed.	Name of owning railway.	Classification.	Section of line, the construction of which has been sanctioned.	Date construction was sanctioned.	MILEAGE SANCTIONED AND STILL REMAINING TO BE CONSTRUCTED.				REMARKS.
Main head.	Sub-head.						5' 6"	3' 3½"	2' 6"	2' 0"	
31	(a)	Shahdara (Delhi)-Saharanpur Light.	Shahdara (Delhi)-Saharanpur Light.	Assisted company receiving land only from Government.	Brought forward... Baraut to Meerut Delhi (Shahdara) to Saharanpur.	4th January 1903. 4th January 1902.	1,519'80"	1,121'67"	425'25"	79'00"	Not commenced. Work commenced.
					Total			125'00"			
36	(a)	Howrah-Amta Light.	Howrah-Amta Light.	Assisted company, subsidized by District Board.	Antpur to Champadanga. Antpur to Rajbulhat	20th March 1902. 20th March 1902.	...	...	...	9'00" 3'50"	Commencement of work not authorised. Commencement of work not authorised.
					Total		...	...	...	12'50"	
Total mileage sanctioned and still remaining to be constructed on the 31st December 1906.							1,519'80"	1,121'67"	550'25"	91'50"	
MILEAGE SANCTIONED FROM 1ST JANUARY TO 31ST MARCH 1907.											
12	(a)	Bengal and North-Western.	Bengal and North-Western.	Assisted Company's line receiving land only from Government.	Benares to Jhounsi	18th February 1906.	...	72'58"	...	...
Total mileage sanctioned from 1st January to 31st March 1907							...	72'58"	...	...

Capital authorized to be raised for the Madras (Guaranteed) railway, State lines leased to companies, to the 31st

NUMBER.		RAILWAYS.	AMOUNT AUTHORIZED TO BE RAISED BY THE COMPANIES UP TO THE 31ST DECEMBER 1906.				AMOUNT RAISED BY THE COMPANIES TARY OF STATE IN ENGLAND TO		
Main head.	Sub-head.		Share Capital.	Debentures.	Debenture stock.	Total.	Share Capital.		Debentures.
							Rate of interest per cent.	Amount.	Cash received.
		Guaranteed.	£	£	£	£		£	£
6	(a)	Madras	10,257,630	2,224,000	..	12,481,630	{ 5 4 4}	8,757,670 999,060 500,000	} 2,219,054
		State lines leased to Companies							
1	(a) { (b) { (c) {	Bengal-Nagpur	4,000,000	1,900,000	..	4,900,000	4	3,000,000	1,892,961
		Do. Extensions . . . . .	..	3,605,000	..	3,605,000	..	..	3,595,983
5	(f)	Indian Midland	3,000,000	3,429,100	..	6,429,100	4	3,000,000	3,418,105
11	(a)	Assam-Bengal	1,500,000	1,355,900	..	2,855,900	3	1,500,000	1,352,525
15	(a)	Burma	2,000,000	..	1,250,000	3,250,000	2½	2,000,000	..
20	(b)	Lucknow-Barilly section (Rohilkund and Kumaon) . . . . .	..	147,000	..	147,000	..	..	160,837
82	(a)	Southern Mahratta	3,500,000	1,365,000	..	4,865,000	3½	3,491,540	1,363,863
22	(a)	Mysore section (Southern Mahratta) . . . . .	..	..	1,200,000	1,200,000	..	..	..
		Total	13,000,000	11,892,000	2,450,000	27,252,000	..	12,901,540	11,784,274
		Branch lines							
2	(a)	Ahmedabad-Dholka	86,667	..	..	86,667	..	..	..
2	(b)	Ahmedabad-Parantij	133,333	..	..	133,333	..	..	..
10	(f)	Hardwar-Dehra	200,000	..	..	200,000	..	..	..
3	(c)	Mydonsingh-Jamialpur-Jazannathganj	166,667	..	..	166,667	..	..	..
4	(e)	South Behar	400,000	..	290,000	690,000	..	379,580	..
2	(f)	Tapti Valley	993,333	..	40,000	1,033,333	..	..	..
9	(b)	Amritsar - Patti	106,667	..	..	106,667	..	..	..
		Total	2,086,667	..	330,000	2,416,667	..	879,580	..
		GRAND TOTAL	25,244,297	14,026,000	2,780,000	42,150,297	..	23,028,750	14,003,328

Details of Debenture loans on 31st December 1906 and the dates at which the loans expire.

Madras Railway—

£		
100,000	3½ per cent.	30th April 1907.
51,200	3½ "	30th June 1907.
200,000	3½ "	31st October 1907.
81,400	3½ "	31st December 1907.
53,300	3½ "	31st December 1907.
174,400	3½ "	30th June 1909.
62,500	3½ "	30th June 1910.
300,000	3 "	1st August 1910.
80,000	3 "	31st December 1910.
500,000	3½ "	19th May 1911.
293,700	3½ "	30th June 1911.
75,000	3½ "	31st December 1911.
249,700	3½ "	30th June 1912.
<u>2,224,000</u>		

Bengal-Nagpur Railway—

£		
390,700	3½ per cent.	10th January 1907.
448,900	3½ "	18th February 1907.
155,000	3½ "	3rd January 1908.
400,000	3½ "	4th May 1908.
265,600	3½ "	18th February 1909.
400,000	3½ "	21st April 1909.
750,000	3½ "	1st June 1909.
400,000	3½ "	15th June 1909.
785,500	3½ "	18th February 1910.
109,300	3½ "	10th July 1908.
400,000	3 "	18th August 1910.
600,000	3½ "	31st January 1911.
400,000	3½ "	5th May 1911.
<u>5,505,000</u>		

DIX '5.

and railways constructed under the "Branch line" terms, the amount raised and the amount withdrawn December 1906.

AND ADVANCED BY THE SECRETARY TO THE 31ST DECEMBER 1906.			AMOUNT RAISED IN INDIA TO THE 31ST DECEMBER 1906.			Total amount raised to the 31st December 1906.	TOTAL AMOUNT WITHDRAWN TO THE 31ST DECEMBER 1906.		REMARKS
Debiture stock.	Capital not bearing interest (premium).	Advances made to companies from money raised under Act 51, Viet., Cap. 5.	Share Capital.	Debiture stock.	Capital not bearing interest (premium).		During calendar year 1906.	Up to the close of calendar year 1906.	
Cash received.									
£	£	£	£	£	£	£	£	£	
...	8,524	...	...	...	...	12,485,208	172,323	12,651,532	
...	8,150	2,900,000	...	...	...	7,801,111	93,762	8,060,760	
...	9,450	...	...	...	...	3,605,433	672,972	9,710,953	
...	-5,977	1,615,000	...	...	...	8,057,128	68,899	8,793,518	
...	15,385	...	...	...	...	2,867,910	...	2,867,910	
1,199,819	...	...	...	...	...	3,199,819	279,755	3,947,017	
...	-735	...	...	...	...	160,102	13,987	484,459	
...	31,007	2,120,000	8,460	...	34	7,024,804	21,791	6,978,189	
1,200,000	24,000	...	...	...	...	1,224,000	6,016	1,237,201	*The Mysore Durbar has deposited £23,480 towards the share of Joint Shares on the Southern Mahratta Railway books chargeable against the capital of the Mysore Railway.
2,399,819	81,280	6,674,900	8,160	...	34	33,949,307	1,161,682	42,080,011	
...	...	...	73,280	...	...	73,280	2,582	72,248	
...	...	...	130,000	...	2,667	132,667	419	133,202	
...	...	...	195,067	...	...	195,067	242	194,952	
...	...	...	161,096	...	...	161,096	1,947	161,016	
290,000	15,000	...	...	...	...	684,580	-147	735,189	
...	...	...	833,333	39,203	17	872,553	-52	872,190	
...	...	...	106,539	...	...	106,539	79,398	79,398	
290,000	15,000	...	1,499,315	39,203	2,684	2,225,782	84,389	2,248,195	
2,689,819	104,904	6,074,900	1,507,775	39,203	2,718	48,651,297	1,418,393	50,979,759	

Indian Midland Railway—

£	3½ per cent.	30th June 1907.
610,000	3½ "	31st December 1907.
421,200	3½ "	3rd October 1908.
500,000	3½ "	30th June 1910.
257,500	3 "	30th June 1910.
150,000	3½ "	30th June 1911.
742,500	3½ "	31st December 1911.
165,000	3½ "	30th June 1912.
582,000	3½ "	
<u>3,429,100</u>		

Lucknow-Bareilly Railway—

£	3½ per cent.	1st July 1910.
32,000	3½ "	1st July 1911.
115,900		
<u>147,900</u>		

Southern Mahratta Railway—

£	3½ per cent.	1st October 1907.
50,000	3½ "	1st April 1908.
100,000	3½ "	1st October 1908.
255,000	3½ "	31st May 1909.
100,000	3½ "	1st October 1909.
85,000	3½ "	1st March 1910.
150,000	3 "	11th April 1910.
100,000	3 "	1st October 1910.
10,000	3½ "	1st April 1912.
505,000		
<u>1,365,000</u>		

Assam-Bengal Railway—

£	3½ per cent.	4th July 1907.
560,000	3½ "	4th July 1908.
495,900	3 "	13th April 1910.
300,000		
<u>1,355,900</u>		

Capital expenditure in thousands of rupees

Number.	Railways (including branches worked).	EXPENDITURE ON NEW LINES IN THOUSANDS OF RUPEES EXCLUDING VALUE OF STORES, etc., NOT FINALLY CHARGED OFF IN THE ACCOUNTS.									
		YEARS.									
		1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.
1 (a) to (g)	Bengal Central . . . . .	...	...	...	...	...	...	...	...	...	...
	Bengal-Nagpur	1,71,83	1,71,20	1,67,01	79,14	40,25	1,42,51	1,17,84	1,02,23	68,63	26,71
2 (a) & (c) to (f) & (n) & (o).	Bombay, Baroda and Central India	16,82	40,86	60,95	24,05	13,72	9,76	23,43	7,56	1,02	6
3	Eastern Bengal State	3,00	13,89	29,15	31,10	40,07	35,32	30,88	38,18	37,15	30,03
4	East Indian	80,80	1,07,94	68,09	39,09	33,15	28,67	48,80	91,17	1,26,85	92,25
5	Great Indian Peninsula	65,88	80,87	67,71	18,77	2,19	4,12	26,13	69,16	16,17	25,16
6 (a) to (h)	Madras	10,91	7,47	11,38	20,80	54,50	39,56	60,42	37,51	47,77	42,45
7	Nagda-Muttra . . . . .	...	...	...	...	...	...	...	1,75	21,89	1,00,30
8	Nizam's Guaranteed State	15,32	40,79	78,37	37,06	...	...	...	...	...	6
9 (a) to (j)	North Western State	1,26,86	62,24	41,82	41,48	54,68	49,91	30,87	1,21,56	1,22,78	1,45,81
10	Ondh and Rohilkhand State	39,38	23,72	39,27	27,17	9,30	20,61	54,52	30,78	29,13	9,73
11	Assam-Bengal	1,09,69	1,35,82	1,05,81	97,65	88,10	71,84	45,68	13,59	62	4,60
12	Bengal and North-Western	1,04,74	62,86	70,90	28,89	30,86	26,15	12,63	46,76	45,07	39,21
13	Bengal Doonars	72	1,86	7,98	18,19	15,61	15,56	8,50	...	...	...
14	Bhavnagar-Gondal-Junagadh-Forbandar	9,30	5,43	...	...	...	...	...	...	...	...
15	Burma	39,67	43,29	62,52	59,63	56,42	35,77	...	3,89	42,25	58,32
16	Deoghur . . . . .	...	...	...	...	...	...	...	...	...	...
17	Dibru-Sadiya . . . . .	...	...	...	...	...	...	...	...	...	62
18	Jodhpur-Bikaner	10,04	26,40	4,86	6,61	4,00	6,77	...	89	1	5
19	Morvi . . . . .	...	...	...	2,32	11	3	85	46,24	7,18	...
2 (b) & (g) to (m).	Rajputana-Malwa	12,69	8,58	2,67	59	21	1,07	1,63	35,80	26,36	—19
20	Rohilkund and Kumaon . . . . .	...	...	...	...	3	43	83	9,74	33,18	9,83
21	South Indian	5,10	—21,05	2,70	14,09	36,50	73,39	56,12	27,81	7,14	...
22	Southern Mahratta . . . . .	...	...	...	...	...	...	2,56	12,60	2,78	9,56
23	Udaipur-Chitor	26	1,13	2,16	45	21	...	...	...	...	...
24	Bara-et-Basirhat Light . . . . .	...	...	...	...	...	...	...	5,69	1,38	...
25	Barsi Light . . . . .	...	...	...	...	...	...	...	23	7,92	...
26	Bukhtiarporo-Bihar Light . . . . .	...	...	...	...	...	...	5,30	...	...	...
27	Catch . . . . .	...	...	...	...	...	...	92	1,35	...	2,71
28	Dholpur-Bari . . . . .	...	...	...	...	...	...	...	...	2,04	80
29	Dwarah-Therria Light . . . . .	...	...	...	...	...	...	8,24	1,39	82	...
30	Kalka-Simla . . . . .	...	...	3,39	4,51	23,53	49,99	50,99	21,40	4,34	...
31	Shahdara (Delhi)-Saharanpur Light . . . . .	...	...	...	...	...	...	...	...	...	8,15
	Banaghat-Krishnagar Light	1,01	5,01	5	...	...	...	...	1	...	...
32	Tarakeshwar-Magra Light . . . . .	...	...	...	...	...	...	16	...	...	...
33	Tozporo-Balipara Light . . . . .	...	...	...	...	...	...	...	...	...	...
35	Darjeeling-Himalayan . . . . .	...	...	...	...	...	...	...	...	...	...
36	Howrah-Amta Light	4,01	29	5	1	8	...	20	2,79	...	...
37	Howrah-Sheakhala Light	2,81	33	...	...	...	...	...	...	...	...
38	Jorhat . . . . .	...	...	...	...	...	...	...	...	...	...
	TOTAL	8,30,33	8,27,93	8,28,84	5,42,51	5,03,52	6,11,46	5,01,99	6,89,57	7,22,43	6,01,81

IX 7.

uring each of the past 10 years.

EXPENDITURE ON ROLLING-STOCK IN THOUSANDS OF RUPEES EXCLUDING VALUE OF STORES, ETC., NOT FINALLY CHARGED OFF IN THE ACCOUNTS.

YEARS.										REMARKS.
1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	
11,59	4,37	1,95	27	3	4	15	* Purchased by the State from the 1st July 1905 and incorporated with the 5' 6" gauge section of the Eastern Bengal State Railway [8(a)]
32	1,13	33,92	27,35	4,29	57,16	24,13	40,04	57,18	21,80	
24	6,00	13,84	13,34	4,24	2,51	7,97	3,26	1,48	4,54	
16,63	10,52	18,21	4,57	13,01	18,12	35,25	15,25	25,14	19,01	
27,27	36,32	1,06,52	64,34	73,57	54,29	17,91	26,98	30,13	54,33	
7,85	1,63	8,27	13,36	21,27	12,27	31,84	37,89	12,63	45,26	
6,57	1,47	3,66	3,26	10,11	25,43	16,44	6,24	7,49	4,29	
...	...	...	...	...	...	...	...	...	7,50
49	3,06	12,80	12,67	1,51	5,86	3,05	72	51	3,15	
36,32	21,85	5,70	79	12,30	22,21	14,34	13,91	28,56	1,14,41	
3,51	7,06	5,68	79	5,85	17,93	23,91	7,58	6,02	4,74	† Represents Expenditure on conversion of the existing line from 2' 6" to 3' 3" gauge.
4,25	2,65	1,63	37	3,05	7,69	9,86	6,32	4,79	10,41	
9,08	24,03	15,84	18,58	18,47	12,49	18,33	3,48	14,00	32,80	
52	1	4,09	2,32	1,40	7	25	5	...	...
67	1,24	8	16	80	35	55	-1,05	...	23	
1,50	6,36	11,96	4,74	20,85	26,60	19,57	12,20	6,64	18,95	
...	
14	20	16	2,52	1,13	...	9	4,47	19	23	
...	6,08	14,14	22	2,22	1,95	4,22	1,36	71	78	
2	12	4	6	10	-12	-22	...	3,00	1,13	
-12	-1,59	3,07	1,83	89	8,70	8,19	3,35	10,09	8,04	‡ Purchased by the State from the 1st July 1904 and incorporated with the Eastern Bengal State Railway.
2	2,42	1,02	3,39	2,06	6,86	6,11	1,33	77	11,65	
1,22	43	73	26	-3	1,46	2,96	1,27	14,75	...	
1,40	5,34	3,42	1,44	1,88	26	85	85	15,58	1,51	
2,25	5	...	...	42	...	...	...	...	...
...	...	...	...	...	...	...	2,05	...	26
1,77	27	...	...	-39	...	...	...	70	4,94
...	...	...	...	...	...	2,17	23	...	15
...	...	...	...	...	...	12	12	10	10
...	...	...	...	...	...	...	...	...	88
...	50	...	§ Purchased by the State from the 1st July 1904 and incorporated with the Eastern Bengal State Railway.
...	...	...	...	...	1,07	3,93	2,85	4,96	1,94
...	
...	1,20	...	24	...	...	...	1	...	...
...	1	18	...	...	...	1	1	8	19
...	6	12	...	...	...	...	...	...	...
2	-25	54	-16	1	9	41	70	12	13	
1,26	99	11	46	...	72	...	30	...	1,62	
1,17	48	...	...	...	...	3	...	...	...
38	20	...	...	-31	4	12	2	...	6
1,37,44	1,43,71	2,67,68	1,77,67	1,98,73	2,84,05	2,62,54	1,92,98	2,60,17	3,75,56	

Capital expenditure in thousands of rupees

Number.	Railways (including branches worked).	EXPENDITURE ON IMPROVEMENT OF EXISTING LINES IN THOUSANDS OF RUPEES EXCLUDING VALUE OF STORES, ETC., NOT FINALLY CHARGED OFF IN THE ACCOUNTS.									
		YEARS.									
		1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.
	Bengal Central	86	2,15	75	1,66	1,18	1,15	73	43	...	...
1 (a) to (y).	Bengal-Nagpur	8,56	57	25	1,68	3,37	1,61	3,58	5,66	5,20	46,73
2 (a) & (c) to (f) & (n) & (o).	Bombay, Baroda and Central India	28,98	15,33	36,60	8,42	21,74	9,89	5,71	4,83	2,74	12,35
3	Eastern Bengal State	27,03	7,64	8,72	13,85	11,37	15,46	23,86	49,13	1,08,73	30,75
4	East Indian	19,82	28,96	40,78	48,92	64,24	58,69	41,88	46,44	63,82	51,52
5	Great Indian Peninsula	4,37	8,04	6,75	10,28	11,65	17,01	23,56	64,79	73,48	53,55
6 (a) to (h).	Madras	3,30	3,16	2,43	3,93	9,33	4,56	5,91	14,26	13,47	15,96
7	Nagda-Mattra . . . .	...	...	...	...	...	...	...	...	...	...
8	Nizam's Guaranteed State	3,15	1,24	-1,05	2,78	6,53	8,14	3,76	2,97	2,76	2,43
9 (a) to (j).	North Western State	28,30	18,92	20,58	19,10	14,67	48,44	22,42	30,94	33,14	42,61
10	Oudh and Rohilkhand State	4,01	4,38	9,74	8,30	9,45	12,75	12,40	19,80	19,62	11,46
11	Assam-Bengal . . . .	...	...	...	...	...	...	...	...	12,03	9,94
12	Bengal and North-Western	2,86	5,05	6,63	12,21	7,19	25,66	21,79	29,04	16,81	25,97
13	Bengal Dooars	1,08	53	38	16	2	5	21	5,55	3,54	2,10
14	Bhavnagar-Gondal-Junagadh-Perbandar	73	2,10	91	31	16	40	3	3	24	39
15	Burma	6,24	5,09	11,31	25,14	22,05	7,91	20,35	21,11	17,60	22,54
16	Deoghur . . . .	...	1	-1	...	...	...	...	...	23	-23
17	Dibru-Sadiya	2,41	7	...	6	7,20	23	32	22	27	8
18	Jodhpur-Bikaner	7	6,35	-81	-1,53	3,16	3,77	62	56	12	35
19	Morvi	49	7	5	-10	1	...	...	-1	-13	-27
2 (b) & (g) to (m).	Rajputana-Malwa	2,85	3,32	3,08	3,53	8,20	13,88	9,48	8,63	13,99	16,93
20	Rohilkhand and Kumaon	1,71	79	21	1,15	1,02	66	1,59	1,56	65	12,16
21	South Indian	76	1,52	3,59	3,03	3,83	1,46	3,40	6,64	8,41	25,83
22	Southern Mahratta	5,60	6,29	7,50	5,79	4,59	3,29	2,98	2,26	5,49	3,30
23	Udaipur-Chitor . . . .	...	...	...	...	19	4	1	...	1	8
24	Baraset-Basirhat Light . . . .	...	...	...	...	...	...	...	...	...	15
25	Barsi Light . . . .	...	...	...	...	...	7	...	...	-4	6,08
26	Bukhtiarapore-Bihar Light . . . .	...	...	...	...	...	...	...	39	1	4
27	Cutch . . . .	...	...	...	...	...	...	...	...	...	...
28	Dholpur-Bari . . . .	...	...	...	...	...	...	...	...	...	...
29	Dwara-Thoria Light . . . .	...	...	...	...	...	...	...	...	...	...
30	Kalka-Simla . . . .	...	...	...	...	...	...	...	...	...	68
31	Shahdara (Delhi)-Saharanpur Light . . . .	...	...	...	...	...	...	...	...	...	...
	Ranaghat-Krishnagar Light . . . .	...	...	...	...	...	...	...	...	...	...
32	Tarakeshwar-Magra Light . . . .	...	1	1	...	2	5	6	3	5	7
33	Tezporo-Bulipara Light	3	1	5	18	...	...	...	...	...	...
35	Darjeeling-Himalayan	38	49	25	10	21	12	31	4	16	20
36	Howrah-Amla Light . . . .	...	...	...	...	...	...	...	14	16	21
37	Howrah-Shoakhala Light . . . .	...	...	...	...	...	...	2	...	-1	...
38	Jorhat . . . .	...	...	4	...	17	3	...	...	...	-6
	TOTAL	1,48,40	1,22,09	1,59,64	1,68,79	2,11,55	2,35,35	2,04,98	3,15,43	4,02,55	3,98,90

DIX 7—concluded.*during each of the past 10 years.*

TOTAL CAPITAL EXPENDITURE IN THOUSANDS OF RUPEES INCLUDING VALUE OF STORES, ETC., NOT FINALLY CHARGED OFF IN THE ACCOUNTS.										REMARKS.
YEARS.										
1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	
10,29	6,90	3,04	34	2,59	1,58	76	—36	...	...
1,99,28	1,62,45	1,98,87	75,84	•77,61	1,76,45	1,94,63	1,19,88	1,19,67	1,16,49	
58,06	80,09	98,92	28,58	56,65	29,50	19,61	9,62	7,90	2,69	
51,23	55,51	56,40	49,25	66,77	81,52	1,19,34	1,09,61	• 2,08,13	94,27	
1,42,53	1,66,97	2,18,13	1,62,19	1,41,12	1,45,82	1,39,68	1,45,03	2,83,23	2,21,73	
71,81	79,51	78,98	53,2	44,54	23,58	1,16,21	1,76,71	1,02,30	1,12,28	
19,63	12,65	19,27	55,11	63,58	60,36	86,09	72,11	69,17	54,97	
...	...	...	...	...	...	...	1,73	46,34	1,46,42	
18,30	60,32	96,90	32,24	18,40	15,84	5,73	5,26	6,53	1,83	
1,06,19	82,47	66,45	83,47	93,87	1,00,10	69,53	2,69,09	2,72,27	3,22,00	
44,90	33,16	55,69	39,26	32,76	76,17	87,45	53,66	41,37	34,11	
1,16,23	1,18,74	1,13,15	86,46	85,47	69,86	53,24	19,81	18,21	25,28	
1,63,10	79,6	70,13	57,94	45,78	63,47	53,92	79,28	90,04	88,14	
2,17	4,25	22,26	19,77	15,2	10,45	7,09	5,35	3,56	2,13	
8,67	8,95	92	17	96	44	67	—1,40	—54	1,68	
59,87	51,62	86,24	92,79	95,26	71,01	31,03	36,97	81,29	99,42	
...	1	—1	...	...	—9	...	...	23	—23	
2,55	27	17	2,57	8,32	1,73	41	1,63	46	93	
10,12	99,36	18,04	4,89	19,78	6,64	—57	2,21	1,60	2,14	
94	3	27	2,22	31	—26	56	6,18	9,85	99	
—2,83	9,43	10,59	17,19	12,74	22,73	39,53	43,74	39,38	39,53	
3,70	2,10	13	5,37	4,31	12,92	4,60	19,79	10,64	25,28	
4,59	—19,88	7,39	17,47	47,49	99,17	52,83	31,08	23,65	30,32	
8,19	11,65	8,74	8,15	4,83	1,22	24,96	34,22	33,19	14,04	
2,51	1,18	2,16	45	82	4	1	...	1	9	
...	...	...	...	...	...	...	7,73	1,73	41	
1,77	27	...	...	—39	19	...	26	14,69	11,32	
...	...	...	...	...	...	7,48	61	1	19	
...	...	...	...	...	...	1,04	1,48	10	2,93	
...	...	...	...	...	...	...	...	2,04	1,56	
...	...	...	...	...	...	8,24	1,39	16	...	
...	...	5,81	6,10	22,96	57,95	48,51	26,93	7,87	—13,06	
...	...	...	...	...	...	...	...	...	14,10	
1,01	6,21	5	24	...	...	...	...	...	...
...	2	24	—1	10	20	38	10	2	26	
3	7	17	18	...	...	...	...	...	...
41	24	79	—0	22	20	72	74	14	—9	
5,27	1,28	10	47	8	72	20	3,23	16	1,82	
9,98	81	...	...	...	...	5	...	—1	...	
37	7	22	—23	—8	—5	8	...	4	1	
11,80,61	10,44,17	12,40,27	8,99,98	9,65,10	11,59,36	11,65,11	12,26,14	14,88,37	14,56,03	

Capital outlay on the different classes of

					Mileage.		
					Open.	Under construction.	TOTAL.
PART I.					Miles.	Miles.	Miles.
CAPITAL EXPENDITURE ON RAILWAYS, THE TRANSACTIONS OF WHICH PASS THROUGH THE GOVERNMENT ACCOUNTS.							
(i).—State lines worked by Companies	...	...	...	...	15,789.63	1,280.87	17,070.80
(ii).—State lines worked by the State	...	...	...	...	6,105.07	295.40	6,400.47
(iii).—Companies' lines guaranteed under the old contracts	...	...	...	...	901.01	1.00	905.01
(iv).—Companies' lines guaranteed under modern contracts	...	...	...	...	32.04	...	32.04
(v).—District Boards' lines	...	...	...	...	103.36	...	103.36
(vi).—Branch Line Companies, receiving rebates from traffic interchanged with main lines.	...	...	...	...	403.15	...	403.15
TOTAL OPEN LINES AND LINES PARTLY OPEN					23,337.56	1,577.27	24,914.83
(vii).—Lines wholly under construction by State agency	...	...	...	...	...	601.37	601.37
(viii).—Lines wholly under construction by Companies	...	...	...	...	...	269.40	269.40
TOTAL (vii) AND (viii)					...	869.77	869.77
(ix).—Unclassified expenditure including collieries, &c.	...	...	...	...	...	...	...
TOTAL PART I					23,337.56	2,447.04	25,784.60
PART II.							
CAPITAL EXPENDITURE ON RAILWAYS, THE TRANSACTIONS OF WHICH DO NOT PASS THROUGH THE GOVERNMENT ACCOUNTS.							
(i).—Branch Line Companies, receiving rebates from traffic interchanged with main lines.	...	...	...	...	580.38	...	580.38
(ii).—Assisted Companies' lines—							
(a) Subsidized by the Government of India	...	...	...	...	162.36	...	162.36
(b) Subsidized by Local Governments	...	...	...	...	136.26	8.53	144.78
(c) Subsidized by District Boards	...	...	...	...	158.00	...	158.00
(d) Receiving land only from Government	...	...	...	...	1,193.76	82.67	1,276.43
TOTAL (ii)					1,650.38	91.19	1,741.57
(iii).—Unassisted Companies' lines	...	...	...	...	41.77	...	41.77
(iv).—Native State lines—							
(a) Worked by Native States	...	...	...	...	1,338.30	27.38	1,365.68
(b) Worked by Companies	...	...	...	...	1,840.12	152.88	1,993.00
(c) Worked by State railway agency	...	...	...	...	235.28	...	235.28
TOTAL (iv)					3,413.70	180.26	3,593.96
(v).—Foreign State lines	...	...	...	...	73.60	...	73.60
TOTAL OPEN LINES AND LINES PARTLY OPEN					5,759.83	271.45	6,031.28
(vi).—Lines wholly under construction by private Companies	...	...	...	...	...	126.88	126.88
(vii).—Lines wholly under construction by Native States	...	...	...	...	...	19.25	19.25
TOTAL (vi) AND (vii)					...	146.13	146.13
(viii).—State outlay on the Patri branch (Bombay, Baroda and Central India railway)...	...	...	...	...	...	...	...
TOTAL PART II					5,759.83	417.58	6,177.41
GRAND TOTAL					29,097.39	2,864.62	31,962.01
ABSTRACT.							
Outlay on open lines and lines partly open—(i to vi, Part I, and i to v, Part II)					29,097.39	1,848.72	30,946.11
Outlay on lines wholly under construction—(vii and viii, Part I, and vi and vii, Part II)					...	1,015.90	1,015.90
Unclassified expenditure (ix, Part I)					...	...	...

DIX 8.

railways at the close of the year 1906.

Capital outlay at close of 1906. (In thousands of rupees.)			REMARKS.
Open lines.	Lines under construction.	TOTAL.	
2,23,64,80	5,60,14	2,29,24,94	The outlay included in Part I under "State lines worked by Companies" on account of the railways purchased by the State from the East Indian, the South Indian, and the Great Indian Peninsula Railway Companies, and under "State lines worked by the State" on account of the railways purchased from the Eastern Bengal, the Sind, Punjab and Delhi and the Oudh and Rohilkhand Guaranteed Railway Companies, represents the actual Capital expenditure incurred by the Companies up to the date of purchase and subsequently by the State.
93,07,49	2,29,59	95,37,08	
14,03,40	...	14,03,40	
29,24	...	29,24	
47,98	...	47,98	
3,17,46	...	3,17,46	
3,34,70,37	7,89,73	3,12,60,10	
...	3,29,89	3,29,89	
...	1,34,33	1,34,33	
...	4,61,22	4,64,22	
...	...	96,63	
3,34,70,37	12,53,95	3,48,20,95	
3,10,64	...	3,10,64	
1,57,26	...	1,57,26	
1,25,00	62	1,25,62	
74,01	...	74,61	
8,49,29	23,76	8,73,05	
12,05,56	24,38	12,29,94	
27,56	...	27,56	
4,72,28	2,77	4,75,03	
12,92,34	31,84	13,24,18	
1,34,41	...	1,34,41	
18,99,01	31,61	19,33,62	
1,50,79	...	1,50,79	
35,93,56	58,99	36,52,55	
...	28,64	28,64	
...	3,60	3,60	
...	32,24	32,24	
...	...	8,08	
35,93,56	91,23	36,92,87	
3,70,63,93	13,45,18	3,85,13,82	
3,70,63,93	8,48,72	*3,79,20,73	* Includes Rs. 8,08,000, item (viii) of Part II.
...	4,96,46	4,96,46	
...	...	96,63	

Capital liability on account of Railways classed

RAILWAYS.	(1) SHARE CAPITAL OF PURCHASED RAILWAYS BEING PAID OFF BY ANNUITIES.						(2)	(3)	(4)	(5)	(6)
	Commuted value of stock purchased.	Deduct.				Net out- standing.	State outlay.	Debt in- curred for purchase of Rail- ways.	Capital advanced by Gov- ernment to Com- panies.	Capital raised by Companies on Secre- tary of State's warrant (in- cluding over- drafts).	Total Capital liability.
		Commuted Capital re- presenting Annuities which were purchased by creation of debt liability included in column 3).	New Stock of Great Indian Peninsula Railway Company issued in exchange for por- tion of Annuity.	Net capital to be paid off by Annuities.	Deduct amount redeemed by Annuity payments.						
INDIA, GENERAL.	£	£	£	£	£	£	£	£	£	£	£
1. East Indian	31,750,000	7,299,157	...	25,450,843	2,519,369	22,931,474	8,164,634	7,635,075	...	8,000,000	47,131,183
2. Rajputana-Malwa (includg Gohra-Rutlum Nagda).	...	...	...	...	...	...	10,768,446	...	...	...	10,768,446
3. Rawari-Phulera . . . . .	...	...	...	...	...	...	335,378	...	...	...	335,378
4. Palanpur-Deosa . . . . .	...	...	...	...	...	...	15,944	...	...	...	15,944
5. Bhopal . . . . .	...	...	...	...	...	...	217,189	...	...	...	217,189
6. State railway stores . . . .	...	...	...	...	...	...	10,633	...	...	...	10,633
7. Expenditure in England for stores purchased and remain- ing unappropriated.	...	...	...	...	...	...	111,332	...	...	...	111,332
CENTRAL PROVINCES.											
8. Warora Colliery . . . . .	...	...	...	...	...	...	85,624	...	...	...	85,624
9. Umaria „ (depreciation on works).	...	...	...	...	...	...	12,178	...	...	...	12,178
10. Bilaspur-Etawah . . . . .	...	...	...	...	...	...	5,009	...	...	...	5,009
11. Nagpur-Chhattisgarh (depre- ciation account).	...	...	...	...	...	...	43,802	...	...	...	43,802
BERMA.											
12. Burma Railway Extensions	...	...	...	...	...	...	829,335	...	...	...	829,335
ASSAM.											
13. Jorhat . . . . .	...	...	...	...	...	...	60,612	...	...	...	60,612
BENGAL.											
14. Eastern Bengal system* . . .	3,091,917	543,817	...	2,548,100	249,811	2,598,289	9,819,374	1,371,901	...	...	13,822,564
15. Murshidabad Branch . . . .	...	...	...	...	...	...	566,987	...	...	...	566,987
16. Dhubri Gauhati . . . . .	...	...	...	...	...	...	521,360	...	...	...	521,360
17. Tirhoot . . . . .	...	...	...	...	...	...	3,757,929	...	...	...	3,757,929
18. Tirhoot new Extensions . . .	...	...	...	...	...	...	731,427	...	...	...	731,427
19. Ranaghat-Bhagwangola . . .	...	...	...	...	...	...	20,163	...	...	...	20,163
20. Katihar-Godagari . . . . .	...	...	...	...	...	...	378,319	...	...	...	378,319
UNITED PROVINCES.											
21. Oudh and Rohilkhand . . . .	...	...	...	...	...	...	4,099,851	10,728,712	...	...	14,828,593
22. Agra-Delhi Chord . . . . .	...	...	...	...	...	...	852,687	...	...	...	852,687
23. Allahabad-Jaunpur . . . . .	...	...	...	...	...	...	205,138	...	...	...	205,138
24. Forbesganj-Nepaul . . . . .	...	...	...	...	...	...	3,267	...	...	...	3,267
PUNJAB.											
25. North Western	14,009,124	4,911,216	...	9,097,908	742,786	8,355,122	31,076,535	4,138,601	...	...	43,570,258
26. Shadara-Sangla . . . . .	...	...	...	...	...	...	158,720	...	...	...	158,720
27. Jech Doab (southern sec.) . .	...	...	...	...	...	...	462,364	...	...	...	462,364
28. Quetta-Nushki . . . . .	...	...	...	...	...	...	580,239	...	...	...	580,239
29. Frontier Railway Reserve . .	...	...	...	...	...	...	293,212	...	...	...	293,212
30. Petroleum Operations, Balu- chistan.	...	...	...	...	...	...	7,946	...	...	...	7,946
31. Jullundur-Hoshiarpur . . . .	...	...	...	...	...	...	969	...	...	...	969
32. Ludhiana-Ferozepore . . . .	...	...	...	...	...	...	1,887	...	...	...	1,887
33. Kalka-Simla . . . . .	...	...	...	...	...	...	1,087,096	...	...	...	1,087,096
34. Loi Shilman . . . . .	...	...	...	...	...	...	117,829	...	...	...	117,829
Carried over	50,151,041	12,754,190	...	37,396,851	3,511,966	33,884,885	75,836,415	23,877,319	...	8,000,000	141,598,619

* Includes the Bengal Central railway.

DIX 9.

as State railways at end of 1906.

RAILWAYS.	(1) SHARE CAPITAL OF PURCHASED RAILWAYS BEING PAID OFF BY ANNUITIES.						(2)	(3)	(4)	(5)	(6)
	Deduct.						State outlay.	Debt in- curred for purchase of Rail- ways.	Capital advanced by Gov- ernment to Com- panies.	Capital raised by Companies on Secu- rity of State's guarantee (including over- drafts).	Total capi- tal liability.
	Commuted value of stock purchased.	Commuted capital repay- ment annuities which were purchas- ed by creation of debt (liability included in column 3).	New stock of Great Indian Peninsula Railway Company issued in exchange for por- tion of annuity.	Net capital to be paid off by annuities.	Deduct amount redeemed by annuity payments.	Net out- standing.					
Brought forward ...	£ 50,151,011	£ 12,754,190	£ .	£ 37,396,851	£ 3,511,966	£ 33,884,885	£ 75,833,415	£ 23,877,319	£ .	£ 8,000,000	£ 111,508,619
35. South Indian (including Pamban Branch).	2,112,526	4,726,169	...	1,418,000	8,256,695
36. Tinnevely-Quilon (British section).	2,787	...	...	287,209	289,996
37. Tinnevely-Quilon (Native State section).	11,815	...	...	774,731	786,546
38. Azhikal-Mangalore	801,311	...	...	...	801,311
39. North-East line, Madras rail- way (East Coast Railway, northern section).	438,107	...	...	...	438,107
40. Nilgiri	249,520	...	...	...	249,520
41. Bezwada extension	78,735	...	...	...	78,735
42. Bezwada-Mahulapattam	67,278	...	67,278
43. Guntakal-Mysore frontier	304,290	...	...	...	304,290
44. Tanjore District Board	198,491	...	77,733	41,047	317,271
45. Vizagapatam Rapar	16,336	...	...	...	16,336
46. Hosur-Kottur	93,997	...	...	...	93,997
47. Bellary-Rayachur	51,898	...	...	...	51,898
48. Tirupittur-Krishnagiri	71,917	...	...	...	71,917
49. Morappur-Dharmapuri	55,789	...	...	...	55,789
50. Coonoor-Cotacamund	81,030	...	...	...	81,030
51. Rame-waram Extension	38,370	...	...	...	38,370
BOMBAY.											
52. Great Indian Peninsula . .	31,859,218	...	1,750,000	33,109,218	2,302,216	30,807,002	1,139,558	5,961,076	2,200,000	2,575,000	42,703,356
53. Bombay, Baroda and Central India	1,067,010	12,499,114	...	2,000,000	13,556,154
54. Jodhpur-Hyderabad (British section)	271,376	...	...	...	271,376
55. Kurnool-Road-Kurnool	1,357	...	...	...	1,357
56. Southern Mahratta (depreci- ation on works).	33,138	...	...	...	33,138
57. Sabarmati-Dholka	3,513	...	...	...	3,513
58. Baran-Kotah	123,037	...	...	...	123,037
59. Nagda-Muttra	1,174,562	...	...	...	1,174,562
	85,010,259	12,754,190	1,750,000	70,506,069	5,814,182	61,691,887	88,301,919	47,067,238	2,345,011	15,128,047	217,535,222
LEASED LINES.											
60. Assam-Bengal	5,339,428	...	...	2,855,900	8,195,328
61. Bengal-Nagpur	2,061,762	...	9,068,961	8,763,147	19,893,670
62. Burma	5,127,438	...	...	3,997,228	9,124,666
63. Indian Midland	2,143,148	5,918,472	8,061,620
4. Lucknow-Bareilly	341,409	...	321,357	147,000	812,766
65. Mysore	1,200,000	1,200,000
66. Southern Mahratta	1,105,228	...	2,120,900	4,865,000	8,100,128
	13,975,515	...	13,066,366	27,718,717	55,390,628
BRANCH LINE.											
67. Hardwar-Dehra	194,952	194,952
TOTAL	85,010,259	12,754,190	1,750,000	70,506,069	5,814,182	61,691,887	102,280,434	47,067,238	16,011,377	43,063,716	273,120,802

NOTE.—The premium paid in purchase of companies' lines are as under:—

	£	Rs.
East Indian railway	6,550,000	@ Rs. 15 = £ 1 = 9,82,50,000
Eastern Bengal railway	1,136,437	" = 1,70,46,555
Sindh-Punjab and Delhi railway	2,938,804	" = 4,40,07,060
South Indian railway	999,277	" = 1,48,39,155
Oudh and Rohilkhand railway .	1,036,040	" = 1,55,40,735
Great Indian Peninsula railway	14,859,218	" = 22,28,68,270
Bombay, Baroda and Central India railway	4,135,280	" = 6,20,29,200

Main results of working Indian railways

Year.	Mileage open.	IN THOUSANDS OF RUPEES.				Gross earnings per mile per week.	Percentage of working expenses to gross earnings.	Percentage of net earnings on Capital outlay on lines wholly and partly open.	PASSENGERS.			GOODS.		
		Capital outlay.	Gross earnings.	Working expenses.	Net earnings.				Number carried in thousands.	Earnings in thousands of rupees.	Average rate charged per mile in pies.	Quantity carried in thousands of tons.	Earnings in thousands of rupees.	Average rate charged per ton per mile in pies.
						Rs.								
1853	20	37,96	90	41	49	87	45.56	1.29	...	...	...	...	...	...
1854	71	4,00,00	2,31	1,42	89	63	61.47	0.25	...	...	...	...	...	...
1855	169	5,50,00	8,13	4,55	3,58	93	55.97	0.65	...	...	...	...	...	...
1856	272	8,00,00	16,10	6,71	9,36	114	41.57	1.17	...	...	...	...	...	...
1857	287	12,00,00	25,43	10,51	14,89	170	41.45	1.24	...	...	...	...	...	...
1858	427	16,00,00	33,82	15,03	18,19	192	46.22	1.14	...	...	...	...	...	...
1859	625	22,50,00	57,24	27,74	29,50	176	48.16	1.31	...	...	...	...	...	...
1860	833	26,66,00	66,67	37,05	29,59	153	55.61	1.11	...	...	...	...	...	...
1861	1,587	34,00,00	93,63	48,69	44,94	120	53.00	1.19	...	...	...	...	...	...
1862	2,333	48,00,00	1,31,45	60,32	51,13	111	59.74	1.13	...	...	...	...	...	...
1863	2,507	53,00,00	2,20,47	1,23,04	87,43	169	69.71	1.65	...	...	...	...	...	...
1864	2,958	58,00,00	2,55,89	1,70,85	1,15,04	186	59.76	1.98	...	...	...	...	...	...
1865	3,363	63,00,00	4,23,81	2,24,27	2,01,57	241	52.43	3.20	...	...	...	...	...	...
1866	3,563	70,00,00	4,91,91	2,59,39	2,32,53	266	52.73	3.32	...	...	...	...	...	...
1867	3,929	80,00,00	5,44,54	2,93,76	2,50,78	236	53.95	3.13	...	...	...	...	...	...
1868	4,098	84,00,00	5,67,09	3,07,46	2,59,63	272	54.22	3.09	...	...	...	...	...	...
1869	4,255	89,00,00	6,13,10	3,41,71	2,71,36	277	53.71	3.05	...	...	...	...	...	...
1870	4,771	90,00,50	6,56,67	3,63,15	3,03,52	269	54.47	3.37	...	...	...	...	...	...
1871	5,074	90,00,70	6,59,20	3,67,97	2,91,23	250	55.82	3.24	...	...	...	...	...	...
1872	5,369	90,00,90	6,82,96	3,73,45	3,09,51	245	54.68	3.44	...	...	...	...	...	...
1873	5,697	91,72,60	7,22,90	3,77,85	3,45,05	244	52.28	3.76	...	...	...	...	...	...
1874	6,226	95,87,15	8,33,77	4,06,89	4,26,88	258	48.14	4.48	...	...	...	...	...	...
1875	6,541	1,00,96,28	7,91,37	3,97,48	3,93,89	233	59.23	3.90	...	...	...	...	...	...
1876	6,860	1,01,77,85	9,33,83	4,46,45	4,87,38	262	47.81	4.65	...	...	...	...	...	...
1877	7,320	1,09,01,24	12,11,28	5,38,68	6,72,60	318	44.47	6.17	...	...	...	...	...	...
1878	8,201	1,18,29,55	11,25,30	5,62,38	5,62,92	269	49.97	4.76	...	...	...	...	...	...
1879	8,475	1,22,82,97	12,08,15	6,36,28	5,81,87	275	51.84	4.76	...	...	...	...	...	...
1880	8,996	1,28,50,91	12,86,55	6,48,00	6,38,55	282	50.37	4.97	...	...	...	...	...	...
1881	9,858	1,40,80,80	14,32,31	7,07,12	7,25,19	285	49.37	5.16	54,764	3,79,23	2.78	13,214	9,55,97	7.35
1882	10,069	1,43,24,42	15,35,23	7,66,61	7,68,42	294	49.95	5.36	58,876	4,08,37	2.71	14,838	10,15,97	7.91

DIX 10.

as one system from the commencement.

YEAR.	Mileage open.	IN THOUSANDS OF RUPEES.				Gross earnings per mile per week.	Percentage of working expenses to gross earnings.	Percentage of net earnings on capital outlay on lines wholly and partly open.	PASSENGERS.			Goods.		
		Capital outlay.	Gross earnings.	Working expenses.	Net earnings.				Number carried in thousands.	Earnings in thousands of rupees.	Average rate charged per mile in pies.	Quantity carried in thousands of tons.	Earnings in thousands of rupees.	Average rate charged per ton per mile in pies.
						Ra.								
1883	10,447	1,48,30,56	16,28,94	7,97,05	8,41,89	301	48.62	5.68	65,099	4,09,08	2.60	16,999	11,28,89	7.30
1884	11,527	1,55,45,04	16,06,62	8,15,62	7,91,00	276	50.76	5.09	73,815	4,46,84	2.56	16,663	10,56,59	7.35
1885	12,208	1,61,91,78	17,08,96	8,86,33	9,12,63	284	49.27	5.64	80,865	4,78,12	2.52	18,925	11,91,54	6.89
1886	12,865	1,70,49,89	18,70,46	8,93,10	9,77,36	285	47.75	5.73	88,436	5,09,77	2.51	19,576	12,38,59	7.02
1887	14,068	1,82,67,93	18,46,81	9,10,33	9,36,48	260	49.31	5.12	95,413	5,35,32	2.51	20,196	11,92,93	7.17
1888	14,525	1,93,04,33	19,76,45	9,87,44	9,89,01	263	49.96	5.12	103,156	5,69,06	2.71	22,393	12,70,04	6.87
1889	15,900	2,05,04,61	20,49,47	10,37,71	10,11,76	257	50.64	4.93	110,650	6,12,74	2.53	22,249	13,05,56	6.88
1890	16,404	2,13,67,94	20,67,01	10,59,89	10,36,12	243	49.87	4.95	114,082	6,25,81	2.51	22,613	12,99,52	7.11
1891	17,283	2,21,06,42	24,04,03	11,30,39	12,73,64	271	47.02	5.76	122,855	6,86,13	2.52	26,159	15,60,81	6.75
1892	17,769	2,27,30,00	23,22,93	10,90,35	12,32,58	253	46.94	5.42	127,388	6,91,15	2.53	26,325	14,77,52	6.70
1893	18,459	2,33,17,87	24,08,42	11,34,77	12,73,65	254	47.12	5.46	135,520	7,29,57	2.50	28,847	15,21,63	6.60
1894	18,840	2,37,79,61	25,50,89	11,98,40	13,52,49	262	46.98	5.69	145,727	7,57,58	2.56	32,644	16,24,82	6.43
1895	19,467	2,44,38,05	26,23,69	12,11,69	14,11,70	261	46.19	5.73	153,081	8,02,21	2.49	33,628	16,36,94	6.36
1896	20,209	2,68,95,23	25,36,14	12,13,84	13,22,30	245	47.86	4.92	159,509	8,22,97	2.45	32,471	15,41,51	6.45
1897	21,115	2,82,12,04	25,60,11	12,47,73	13,12,38	233	48.74	4.65	150,584	7,62,13	2.47	33,926	15,88,89	6.36
1898	22,024	2,92,00,20	27,41,31	12,98,68	14,42,63	244	47.37	4.94	151,566	7,53,68	2.50	35,642	17,84,97	6.00
1899	23,507	3,08,50,12	29,36,78	13,93,36	15,43,42	246	47.45	5.00	161,729	8,09,39	2.51	39,748	19,19,82	5.98
1900	24,752	3,29,53,34	31,54,32	15,09,31	16,45,01	245	47.85	4.99	176,308	8,95,07	2.51	42,896	20,36,52	5.83
1901	25,363	3,39,16,89	33,60,38	15,72,45	17,87,93	255	46.79	5.27	194,749	10,07,17	2.48	43,392	21,23,87	5.77
1902	25,931	3,49,77,34	33,92,69	16,70,49	17,22,20	252	49.24	4.93	196,648	10,27,48	2.51	45,577	21,23,41	5.68
1903	26,956	3,41,11,23	36,00,82	17,11,09	18,89,73	257	47.52	5.54	210,231	10,98,14	2.51	47,684	22,41,92	5.64
1904	27,565	3,52,85,95	39,64,97	18,77,50	20,87,47	277	47.36	5.91	227,097	11,76,20	2.51	52,051	25,18,51	5.39
1905	28,295	3,66,93,94	41,68,09	19,94,00	21,74,09	283	47.84	5.92	248,157	12,73,83	2.47	54,936	26,20,71	5.19
1906	29,097	3,79,20,73	44,11,73	22,00,71	22,10,99	292	49.88	5.83	271,063	13,68,31	2.46	58,869	27,59,69	5.42

APPENDIX

Summary of the general
Indian Railways traffic

Calendar year.	GENERAL RESULTS			
	Total Capital outlay in thousands of rupees.	Gross earnings in thousands of rupees.	TOTAL WORKING EXPENSES.	
			Amount in thousands of rupees.	Proportion per cent to gross earnings.
1	2	3	4	5
1902	349,77,34	33,92,69	16,70,49	49.24
1903	344,11,23	36,00,82	17,11,09	47.52
1904	352,63,96	39,61,97	18,77,50	47.36
1905	3,66,35,94	41,68,09	19,91,00	47.81
1906	3,79,20,73	44,11,73	22,06,74	49.88

Calendar year.	GROSS EARNINGS IN THOUSANDS									
	COACHING TRAFFIC.							GOODS		
	1st class.	2nd class.	Inf. & ex- clude class.	3rd class.	Season and vacation tickets.	Other Coaching Traffic.	Total Coaching Traffic (sum of 15 to 29).	Total Good Traffic (sum of 25 to 27).	General merchandise.	Coal and iron ore for the public and foreign railways
14	15	16	17	18	19	20	21	22	23	24
1902	38,57	56,59	67,00	8,54,97	9,75	1,17,60	11,75,08	21,23,11	17,10,72	2,26,75
1903	41,50	58,13	71,68	9,16,31	10,11	1,56,26	12,54,40	22,41,92	18,53,15	2,29,93
1904	40,76	59,73	71,54	9,89,63	11,19	1,61,36	13,37,56	25,19,81	20,85,56	2,56,13
1905	45,12	64,16	83,06	10,66,73	12,23	1,61,69	14,34,72	26,20,71	21,32,22	2,89,19
1906	47,23	67,65	86,87	11,53,18	13,38	1,68,34	15,36,65	27,59,69	22,36,58	3,21,84

Number of passengers and quantity of goods carried, the average miles

Calendar year.	PASSENGERS CARRIED IN THOUSANDS, THE AVERAGE MILES CARRIED AND											
	1ST CLASS.			2ND CLASS			INTERMEDIATE CLASS.			3RD CLASS.		
	No.	Average miles carried.	Average rate charged per mile in pice.	No.	Average miles carried.	Average rate charged per mile in pice.	No.	Average miles carried.	Average rate charged per mile in pice.	No.	Average miles carried.	Average rate charged per mile in pice.
36	37	38	39	40	41	42	43	44	45	46	47	48
1902	563	102.28	12.86	2,530	82.39	5.21	6,813	61.30	3.11	171,716	41.08	2.33
1903	594	101.71	12.31	2,580	78.13	5.54	7,214	61.61	3.09	184,292	40.94	2.33
1904	608	95.98	13.41	2,715	74.23	5.69	7,394	62.89	3.09	199,651	40.71	2.34
1905	662	98.29	13.31	2,919	72.92	5.77	8,104	63.78	3.09	218,413	40.92	2.30
1906	684	100.71	13.16	3,026	71.47	5.74	8,491	64.12	3.06	239,391	40.36	2.29

DIX 11.

results of working

ted as one system.

OF WORKING.

NET EARNINGS.		PER MILE OPEN.			PER TRAIN-MILE.			REMARKS
Amount in thousands of rupees.	Percentage on Capital outlay.	Gross earnings	Working expenses.	Net earnings	Gross earnings	Working expenses	Net earnings	
6	7	8	9	10	11	12	13	
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
17,22.20	1.02	13,984	6,142	8,642	3.67	1.81	1.86	The decrease in the capital outlay for 1903 is due to the revision of the capital outlay hitherto adopted for line purchased by the State from Guaranteed Railway companies.
18,89.73	5.14	13,358	6,448	7,910	3.75	1.73	1.97	
20,87.47	5.91	11,314	6,811	7,553	3.66	1.81	2.01	
21,74.09	5.92	11,731	7,047	7,684	3.83	1.86	2.01	
22,10.90	5.83	15,162	7,553	7,599	3.85	1.92	1.93	

OF RUPEES.

WORKING EXPENSES IN THOUSANDS OF RUPEES.

TRAFFIC.		Revenue stores, including coal and material for construction.	Miscellaneous.	Effect of telegraph.	Steam-turbines and machinery.	Engineering.	Locomotive.	Carriage and wagon.	Traffic.	General.	Total.	Total, including provision for depreciation and reserve fund.
Military stores.	Revenue stores, including coal and material for construction.											
25	26	27	28	29	30	31	32	33	34	35	36	37
21.67	1,14.93	23.68	7.72	56.85	3,89.77	5,78.85	1,76.28	2,13.70	1,73.70	8.20		
23.07	1,13.90	27.51	7.81	96.06	3,88.99	6,11.55	1,52.51	2,02.19	1,88.91	16.74		
19.14	1,0.04	22.27	8.06	100.00	1,37.28	6,72.07	1,76.74	2,10.25	1,75.97	1,11.99		
20.63	1,06.51	28.77	8.79	109.67	1,81.19	7,04.48	1,84.05	2,31.02	1,80.93	1,03.03		
20.58	1,51.54	37.20	8.63	106.76	5,47.21	7,72.89	2,03.66	3,71.17	1,98.04	1,11.61		

The totals of columns 23 to 27 are more than the figures shown in column 32 by the amount of the Calcutta Railway link earnings.

carried and the average rate charged, and the train-mileage run by railways in India.

THE AVERAGE RATE CHARGED.					TRAIN MILES RUN (IN THOUSANDS).				GOODS TRAFFIC		
SEASON AND VENDOR'S TICKETS.		TOTAL NO. OF PASSENGERS CARRIED.			Coaching.	Goods.	Mixed.	Total train-mileage (includes mileage of non-passenger traffic).	Tons carried (in thousands).	Average rate charged per ton-mile.	Average rate charged per mile.
No.	Average miles carried.	Average rate charged per mile in pice.	No.	Average miles carried.							
49	50	51	52	53	54	55	56	57	58	59	60
15,626	8.85	1.41	193,618	40.03	21,768	76,019	31,781	92,527	15,537	157.54	5.08
15,551	8.75	1.48	210,231	30.90	25,889	76,308	31,438	95,900	17,684	159.93	5.64
10,729	9.08	1.41	227,097	39.06	31,577	68,797	28,620	102,721	22,051	172.42	5.39
18,029	9.16	1.42	248,157	59.90	33,191	69,712	29,892	107,045	51,936	176.60	5.19
19,408	9.57	1.38	271,063	29.43	37,155	41,693	31,014	114,354	58,669	165.27	5.42

APPENDIX 12.

General results of working each railway system.

NUMBER.		Railway system (vide Appendix 38).	Year.	Number of passengers carried (in thousands).	Quantity of goods and materials carried (in thousands of tons).	Gross earn- ings (in thousands of rupees).	Working expenses (in thousands of rupees).	Net earnings (in thousands of rupees).	Percentage of working expenses to gross earnings.	REMARKS.	
Main head.	Sub-head.										
5' 6" GAUGE.											
...	...	Bengal Central	1902 1903 1904 1905 1906	1,911 1,989 2,041 21,070 \$	159 206 235 176 \$	13,17 15,09 15,60 16,06 \$	7,43 13,01 10,20 15,03 \$	5,74 5,08 5,40 11,58 \$	56.43 66.36 65.40 76.28 \$	† Figures shown are only for the first-half of the year. Those for the second-half have been included with Eastern Bengal State railway, broad gauge. \$ Included with the Eastern Bengal State railway, broad gauge.	
1	(a), (f) and (e)	Pengal-Nagpur	1902 1903 1904 1905 1906	6,472 6,479 7,745 8,202 9,811	2,880 2,918 2,381 3,975 5,615	1,12,18 1,55,18 1,87,12 2,41,71 2,69,47	72,80 84,02 93,15 1,10,88 1,27,95	69,38 70,46 95,87 1,34,03 1,41,51	51.20 51.69 49.31 45.23 47.49		
2	(a), (e) to (f), (n) and (o)	Bombay, Baroda and Central India.	1902 1903 1904 1905 1906	18,894 19,054 21,681 23,889 24,839	1,927 1,770 1,797 2,055 2,314	1,71,20 1,83,76 1,91,03 2,11,73 2,19,23	83,83 91,73 90,19 92,47 1,03,54	87,37 92,03 1,00,84 1,19,26 1,15,69	48.96 49.92 47.20 43.67 47.23		
3	(a)	Eastern Bengal State	1902 1903 1904 1905 1906	13,654 14,331 14,883 17,090 21,138	1,800 2,051 2,610 2,775 3,694	1,03,83 1,01,22 1,08,77 1,18,00 1,11,12	59,03 51,39 57,80 64,14 83,13	53,80 50,83 50,97 63,56 67,99	48.18 50.27 53.14 54.61 58.00		
4	(a) to (d)	East Indian	1902 1903 1904 1905 1906	23,276 24,282 25,681 25,938 28,143	10,484 10,702 12,241 12,236 12,517	7,04,31 7,26,62 7,87,26 7,79,46 8,26,07	2,58,80 2,46,23 2,66,82 2,82,15 3,21,75	4,45,51 4,80,39 5,20,44 4,97,31 5,04,32	36.71 33.89 33.89 36.20 38.95		
5	(a)	Great Indian Peninsula	1902 1903 1904 1905 1906	18,349 20,221 22,474 23,293 27,291	2,278 2,518 2,902 5,679 5,879	4,21,25 4,08,09 5,80,20 6,30,41 6,41,02	2,13,87 2,30,10 2,92,83 3,05,37 3,22,01	2,11,38 2,08,20 2,93,37 3,25,07 3,22,01	50.17 49.18 49.96 48.44 50.00		
5	(b) to (g)	Indian Midland	1902 1903 1904 1905 1906	2,549 2,549 2,549 2,549 2,549	1,349 1,349 1,349 1,349 1,349	1,09,63 1,09,63 1,09,63 1,09,63 1,09,63	55,67 49,68 49,68 49,68 49,68	53,96 50,65 50,65 50,65 50,65	50.78 49.52 49.52 49.52 49.52		* Included with the Great Indian Peninsula railway.
6	(a) to (d)	Madhya	1902 1903 1904 1905 1906	13,005 13,712 14,953 14,996 15,373	2,319 2,349 2,748 2,822 2,891	1,06,04 1,73,17 1,90,53 2,08,11 2,13,90	91,09 1,01,50 1,11,29 1,22,39 1,27,09	74,95 71,67 73,24 86,02 86,81	54.86 58.51 58.41 58.73 59.42		
8	(a) & (b)	Nizam's Guaranteed State	1902 1903 1904 1905 1906	1,759 1,797 1,476 1,583 1,507	935 895 878 857 870	46,96 46,26 46,53 46,26 48,33	18,73 19,33 16,83 15,72 18,43	28,23 26,93 29,70 30,54 29,90	39.89 41.79 36.17 33.98 38.13		
9	(a) to (f)	North Western State--									† Information not available.
		Commercial Section	1902 1903 1904 1905 1906	+ + + + +	+ + + + +	4,17,94 4,89,77 6,12,74 5,99,17 6,35,58	2,23,99 2,20,61 2,63,32 2,81,14 3,09,24	1,93,95 2,69,16 3,49,42 3,18,03 3,26,34	53.59 45.04 42.97 46.92 46.65		
		Military Section	1902 1903 1904 1905 1906	+ + + + +	+ + + + +	37,49 38,99 46,00 43,07 50,49	41,97 41,71 52,19 43,97 50,83	-4,88 -2,72 -6,19 -90 -54	113.16 106.98 113.47 102.09 101.07		
		Total	1902 1903 1904 1905 1906	20,822 22,777 25,534 26,017 33,598	5,074 6,064 6,131 7,237 8,051	4,55,03 5,28,76 6,58,74 6,42,24 6,85,87	2,65,96 2,72,32 3,15,51 3,25,11 3,60,07	1,89,07 2,66,44 3,43,23 3,17,13 3,25,80	58.44 49.61 47.89 50.62 52.50		
10	(a) to (c)	Oudh and Rohilkhand State	1902 1903 1904 1905 1906	8,332 8,902 9,776 10,797 11,869	2,302 2,350 2,541 2,310 2,256	1,34,18 1,42,13 1,55,60 1,56,99 1,68,01	68,81 68,49 82,95 92,21 88,53	65,37 73,64 72,65 64,78 79,48	51.28 48.19 53.31 58.74 52.69		
3' 3½" GAUGE.											
11	(a)	Assam-Fengal	1902 1903 1904 1905 1906	1,763 1,981 2,120 2,476 2,732	326 403 361 432 604	20,96 24,28 30,10 34,83 42,20	18,42 19,58 28,57 33,00 37,92	2,54 4,70 1,53 1,83 4,28	87.86 80.64 94.92 94.75 89.86		

APPENDIX 12—contd.

General results of working each railway system—contd.

NUMBER.		Railway system (vide Appendix 39).	Year.	Number of passengers carried (in thousands).	Quantity of goods and minerals carried (in thousands of tons).	Gross earnings (in thousands of rupees).	Working expenses (in thousands of rupees).	Net earnings (in thousands of rupees).	Percentage of working expenses to gross earnings.	REMARKS.
Main head.	Sub-head.									
12	(a) & (b)	8' 3 3/4" GAUGE—contd. Bengal and North-Western ...	1902	10,126	1,460	1,01,80	47,04	54,46	46.35	
			1903	12,977	1,707	1,19,15	48,50	70,65	40.71	
			1904	12,910	1,783	1,29,49	51,60	78,30	39.70	
			1905	14,006	1,815	1,21,61	53,31	70,30	43.13	
			1906	15,169	2,089	1,43,43	64,93	79,00	41.45	
13	(a) & (b)	Bengal Doonars ...	1902	362	91	5,27	2,69	2,58	51.01	
			1903	443	121	6,53	3,28	3,30	49.87	
			1904	519	171	7,61	3,56	3,15	62.02	
			1905	486	194	8,92	4,35	4,47	41.32	
			1906	453	201	9,93	4,05	5,88	40.79	
14	(a) to (d)	Bhavnagar-Gondal-Junagad- Porbandar.	1902	1,506	245	16,85	10,02	6,83	59.49	
			1903	1,909	264	20,51	9,82	9,72	50.27	
			1904	1,938	302	22,37	10,56	11,81	47.20	
			1905	2,105	284	22,40	10,39	11,41	49.03	
			1906	2,250	316	23,57	10,98	12,59	45.58	
15	(a)	Barua ...	1902	12,165	1,603	1,25,03	72,30	52,73	57.83	
			1903	14,220	1,869	1,36,14	83,95	52,19	61.66	
			1904	16,118	2,175	1,51,02	85,32	65,70	56.49	
			1905	16,874	2,130	1,57,76	95,95	61,81	60.82	
			1906	17,610	2,589	1,57,32	98,70	58,62	62.74	
16	(a)	Deoghur ...	1902	185	10	30	24	6	79.75	
			1903	262	15	41	30	11	73.17	
			1904	281	14	47	32	15	68.45	
			1905	273	14	45	32	13	71.11	
			1906	329	15	51	33	21	61.11	
17	(a) & (b)	Dihru-Sadiya ...	1902	702	510	9,10	4,58	4,12	54.77	
			1903	270	556	9,76	5,26	4,50	53.89	
			1904	339	613	10,44	5,70	4,74	56.75	
			1905	373	642	10,14	5,55	4,59	54.73	
			1906	396	667	10,73	6,10	4,33	59.65	
3	(b) to (d)	Eastern Bengal State ...	1902	*	1,040	80,81	33,93	40,88	49.41	* Included with Eastern Bengal State Railway (5' 6" gauge).
			1903	*	*	85,50	41,28	41,22	51.78	
			1904	*	*	89,55	50,17	39,38	56.02	
			1905	*	*	89,38	44,68	44,70	49.99	
			1906	*	*	1,09,60	55,23	50,37	51.04	
8	(c)	Hyderabad-Godavari Valley...	1902	1,216	587	22,88	13,20	9,68	57.69	
			1903	1,183	546	22,14	13,28	8,86	59.88	
			1904	1,261	349	22,12	11,37	7,75	64.97	
			1905	1,591	373	29,64	16,35	13,29	55.16	
			1906	1,803	342	30,43	16,11	14,22	53.12	
18	(a) to (c)	Jodhpur-Bikaner ...	1902	1,378	456	25,02	13,96	11,66	52.18	
			1903	1,560	403	27,44	13,24	14,20	48.56	
			1904	1,702	439	20,60	13,51	17,09	44.15	
			1905	1,970	471	35,21	14,91	20,33	42.31	
			1906	2,107	587	40,76	18,06	22,10	45.78	
19	(a)	Morvi ...	1902	243	19	3,05	1,92	1,13	62.85	
			1903	257	19	2,98	1,53	1,45	51.43	
			1904	298	34	3,55	1,67	1,89	46.73	
			1905	286	40	3,23	1,49	1,74	46.13	
			1906	235	34	3,08	1,48	1,60	48.15	
6	(e) & (f)	Nilgiri and Shoranur-Cochin	1902	339	40	4,14	2,59	1,65	58.23	
			1903	695	156	6,28	3,56	2,72	56.53	
			1904	724	119	6,83	4,23	2,60	61.87	
			1905	782	105	7,02	4,32	2,10	70.09	
			1906	742	105	7,12	5,19	1,93	72.89	

APPENDIX 12—contd.

General results of working each railway system—contd.

NUMBER.		Railway system (vide Appendix 3 rd).	Year.	Number of passengers carried (in thousands).	Quantity of freighted minerals carried (in thousands of tons).	Gross earn- ings (in thousands of rupees).	Working expenses (in thousands of rupees).	Net earnings (in thousands of rupees).	Percentage of working expenses to gross earnings.	REMARKS.
Main head.	Sub-head.									
		3' 3½" GAUGE—contd.								
2	(b) & (g) to (m)	Rajputana-Malwa ...	1902	1,401	3,270	2,65,04	1,25,79	1,39,25	47.46	
			1903	12,417	1,976	2,33,74	1,11,11	1,22,63	49.67	
			1904	17,194	2,117	2,11,47	1,14,80	1,26,57	47.56	
			1905	15,233	2,669	2,33,28	1,25,85	1,27,43	42.91	
			1906	16,831	2,691	2,89,52	1,36,96	1,52,56	47.31	
20	(c) & (b)	Rohilkhand and Kumaon ...	1902	7,592	432	18,64	8,76	9,88	47.00	
			1903	1,546	419	18,16	8,47	9,69	46.65	
			1904	1,633	439	19,15	8,93	10,22	46.65	
			1905	1,772	441	19,78	10,13	9,65	50.96	
			1906	2,867	502	21,51	12,57	12,02	51.12	
21	(a) to (f)	South Indian ...	1902	17,387	1,910	1,10,10	10,97	59,13	45.83	
			1903	17,878	3,516	1,88,55	51,81	77,04	40.21	
			1904	19,164	3,103	1,31,49	60,32	73,78	45.10	
			1905	19,383	3,105	1,41,03	69,77	71,26	49.47	
			1906	20,311	3,233	1,43,68	81,00	63,68	55.99	
22	(a) to (g)	Southern Mahratta ...	1902	6,797	1,016	93,17	60,65	32,52	65.09	
			1903	6,698	1,089	95,8	58,93	36,87	61.51	
			1904	7,178	1,331	1,09,95	68,0	39,45	62.46	
			1905	8,411	1,342	1,14,26	69,36	44,90	60.70	
			1906	8,991	1,415	1,22,82	74,12	48,70	60.35	
23	(a)	Udaipur-Chitor ...	1902	179	27	2,17	1,20	97	53.31	
			1903	130	15	1,78	1,11	67	62.63	
			1904	162	11	1,51	98	53	61.86	
			1905	237	16	2,08	1,04	1,04	50.00	
			1906	276	27	2,15	1,12	1,03	45.16	
24	(a)	2' 6" GAUGE. Baraset-Basirhat Light ...	1902	...	...	...	...	...	...
			1903	...	...	...	...	...	...
			1904	...	...	...	...	...	...
			1905	298	2	1,11	55	56	49.55	
			1906	312	4	1,51	71	80	47.02	
25	(a)	Barsi Light ...	1902	72	59	1,50	97	51	64.81	
			1903	62	45	1,30	77	53	59.23	
			1904	77	51	1,67	1,02	65	61.09	
			1905	101	82	2,19	80	1,39	31.53	
			1906	177	67	2,19	1,09	1,10	49.77	
26	(a)	Bukhtiar-pore-Bihar Light ...	1902	...	...	...	...	...	...
			1903	118	7	56	21	15	57.74	
			1904	298	25	1,14	48	61	41.90	
			1905	252	19	89	53	36	59.55	
			1906	274	28	1,11	63	48	56.78	
27	(a)	Cutch ...	1902	...	...	...	...	...	...
			1903	...	...	...	...	...	...
			1904	...	...	...	...	...	...
			1905	3	7	22	6	16	27.27	
			1906	9	11	40	20	20	50.00	
28	(a)	Kalka-Simla ...	1902	...	...	...	...	...	...
			1903	6	2	32	25	7	78.00	
			1904	84	25	5,90	3,82	2,08	64.41	
			1905	97	27	7,52	3,51	4,01	46.68	
			1906	96	32	7,64	4,57	3,07	59.82	

APPENDIX 12—conold.

General results of working each railway system—conold.

NUMBER.		Railway system. (vide Appendix 38.)	Year.	Number of passengers carried (in thousands).	Quantity of goods and minerals carried (in thousands of tons).	Gross earn- ings (in thousands of rupees).	Working expenses (in thousands of rupees).	Net earnings (in thousands of rupees).	Percentage of working expenses to gross earnings.	REMARKS.
Main head.	Sub-head.									
1	(c)	Mourbhanj ...	1902	
			1903	...	...	...	...	...	...
			1904	...	...	...	...	...	...
			1905	30	13	31	24	7	77.42	
			1906	64	12	45	23	22	51.11	
1	(d)	Parlakimedi Light ...	1902	
			1903	52	4	17	27	10	155.58	
			1904	59	7	21	22	1	106.29	
			1905	68	10	27	23	4	85.19	
			1906	82	7	21	31	10	147.62	
20	(c)	Powayan Light ...	1902	258	24	76	53	23	70.24	
			1903	269	22	76	43	29	60.84	
			1904	272	25	76	49	31	60.34	
			1905	299	30	92	56	36	60.87	
			1906	322	32	1,00	60	40	60.00	
		Ranaghat-Krishnagar Light	1902	241	1	76	55	21	71.97	†Included with the Eastern Bengal State Railway metre and special gauges.
			1903	248	7	86	53	33	60.86	
			1904	†	†	†11	†29	†12	70.24	
			1905	†	†	†	†	†	†	
			1906	†	†	†	†	†	†	
32	(a)	Tarakeswar-Magra Light	1902	428	11	84	59	25	70.52	‡Figures shown only for the first-half of the year. Those for the second-half have been included with the Eastern Bengal State Railway metre and special gauges.
			1903	427	17	85	60	25	70.40	
			1904	472	23	90	62	28	69.25	
			1905	456	22	87	65	22	74.71	
			1906	508	25	1,00	67	33	67.00	
33	(a)	Tezporc-Balipara Light	1902	125	8	85	63	22	74.53	
			1903	145	9	95	67	28	70.72	
			1904	149	8	88	71	17	80.43	
			1905	155	14	1,03	76	27	73.79	
			1906	156	16	1,15	80	35	69.57	
6	(g) & (h)	Morapur-Dharmappuri and Tirupattur-Krishnagiri ...	1902	
			1903	...	...	...	...	...	...
			1904	...	...	...	...	...	...
			1905	37	2	13	14	1	107.69	
			1906	245	14	79	81	2	102.53	
35	(a)	Darjeeling-Himalayan	1902	80	33	8,50	4,72	3,78	55.51	
			1903	109	44	9,62	5,45	4,17	56.65	
			1904	139	44	10,45	5,73	4,72	53.46	
			1905	137	44	9,72	5,61	4,11	57.72	
			1906	134	44	9,81	5,72	4,03	58.92	
36	(a)	Howrah-Amta Light	1902	783	14	2,65	1,32	1,33	49.86	
			1903	808	17	2,77	1,39	1,38	50.82	
			1904	855	13	2,97	1,42	1,55	47.82	
			1905	940	17	3,29	1,51	1,78	45.90	
			1906	993	20	3,51	1,74	1,77	49.57	
37	(a)	Howrah-Sheakhala Light	1902	314	6	82	50	32	61.33	
			1903	343	7	87	52	35	59.85	
			1904	343	6	86	47	39	54.72	
			1905	351	6	88	50	38	56.82	
			1906	364	7	91	54	37	59.34	
38	(a)	Jorhat	1902	130	12	87	90	3	104.22	
			1903	155	12	91	77	14	85.02	
			1904	163	10	74	78	4	105.17	
			1905	167	10	70	76	3	98.20	
			1906	162	15	93	80	13	86.02	

Principal commodities carried by railways and the

[The total quantity of each commodity represents the total weight conveyed over all railways in India]

Number.		Railway system, vide Appendix 38.	I.		II.		2.							
Main head.	Sub-head.		Apparel including drapery, haberdashery, millinery, uniforms, accoutrements, boots and shoes.		Coal and coke carried for the public and foreign railways.		1. Raw.		(a) Twist and yarn, European.		(b) Twist and yarn, Indian.			
			Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.		
			Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.		
		5' 6" gauge.												
1	(a), (b) & (c)	Bengal-Nagpur	378	8,566	2,012,391	62,85,536	19,360	2,38,006	4,610	89,770	15,733	1,86,486		
2	(a), (c) to (f) & (u) & (v)	Dombay, Baroda and Central India	649	14,455	77,402	3,22,075	172,186	17,69,407	622	9,028	15,918	2,41,849		
3	...	Eastern Bengal State	833	9,101	562,598	4,47,352	3,201	12,450	1,921	14,049	3,567	28,504		
4	...	East Indians	4,006	1,09,780	6,484,721	2,16,25,490	70,052	9,42,872	1,862	48,050	16,762	2,08,681		
5	...	Great Indian Peninsula	1,322	51,866	219,622	9,89,398	363,527	87,23,423	12,340	2,20,369	18,086	2,00,063		
6	(a) to (d)	Madras	645	15,370	361,826	8,31,600	38,365	3,68,690	4,905	43,560	16,365	1,40,236		
8	(a) & (b)	Nizam's Guaranteed State	90	1,785	350,209	11,75,206	8,742	53,468	3,190	34,927	2,722	38,211		
9	...	North Western State	4,260	97,946	153,860	4,20,498	83,917	9,34,068	1,623	32,860	8,098	1,38,127		
10	...	Oudh and Rohilkhand State	688	8,027	65,411	2,69,378	28,086	1,62,347	2,171	13,351	6,786	47,534		
		3' 3½" gauge.												
11	...	Assam-Bengal	128	1,711	22,806	63,496	2,570	19,627	677	8,022	376	3,410		
12	...	Bengal and North-Western	403	11,939	119,559	2,54,783	1,393	16,565	408	5,343	6,085	62,139		
13	...	Bengul-Dooars	52	91	13,951	58,414	1	3	18	68	40	174		
14	...	Bhavnagar-Gondal-Junagad-Portbandar	370	2,941	11,064	11,285	32,360	1,51,761	48	329	1,114	5,994		
15	...	Burma	587	10,415	1,155	1,588	5,426	27,247	3,468	66,670	449	6,693		
16	...	Deoghur	...	...	...	...	...	...	...	...	...	...
17	...	Dibru-Sadiya	...	...	562,200	4,62,560	191	2,332	...	...	...	...
18	(e)	Hyderabad-Jodavari Valley	63	1,775	8,937	40,040	33,552	4,00,158	398	7,297	1,039	31,281		
18	...	Jodhpur-Bikaner	267	3,406	22,403	65,603	17,805	78,501	13	87	622	3,901		
19	(e) to (h)	Madras	58	559	586	818	525	3,930	403	1,122	1,239	4,876		
19	...	Morvi	31	174	167	159	2,362	14,513	1	6	57	214		
20	(b) & (g) to (u)	Rajputana-Malwa	1,041	25,250	38,279	1,16,184	99,990	10,57,800	695	9,485	12,715	2,97,006		
20	(a) & (b)	Rohilkhand and Kumaon	386	3,551	1,292	1,497	1,011	3,242	139	622	2,333	10,976		
21	...	South Indian	167	2,253	10,021	25,790	37,434	1,86,271	2,755	31,943	10,369	78,325		
22	...	Southern Mahratta	305	4,355	9,055	47,030	106,065	5,11,474	2,386	32,131	12,339	1,26,275		
23	...	Udaipur-Chitor	16	120	69	90	1,672	7,345	5	40	30	172		
		2' 0" gauge.												
24	...	Barasat-Basirhat Light	...	...	...	...	...	...	...	...	...	...
25	...	Baru Light	8	38	36	72	9,412	24,380	88	329	178	410		
26	...	Bukhtiar-pore-Dehar Light	...	...	...	...	...	...	...	...	...	...
27	...	Cutch	...	...	43	118	131	340	62	211	...	...
30	...	Kalka-Simla	314	8,333	4,680	41,771	1	34	2	58	10	232		
1	(e)	Mourbhanj	1	2	204	345	1	3	...	...	19	40
1	(d)	Parlakundi Light	4	3	...	...	...	...	...	...	189	173
20	(e)	Powayan Light	...	...	...	...	...	...	...	...	...	...
33	...	Tarakeshwar-Magra Light	...	...	142	124	...	...	...	...	...	...
33	...	Tez-pore-Balipara Light	...	...	2,946	7,684	13	139	...	...	...	...
		2' 0" gauge.												
35	...	Darjeeling-Himalayan	203	5,939	1,657	15,302	4	100	4	113	193	3,647		
36	...	Howrah-Amta Light	...	...	...	...	...	...	...	...	...	...
37	...	Howrah-Sheekhala Light	...	...	...	...	...	...	...	...	...	...
38	...	Jorhat	...	...	...	...	...	...	...	...	...	...
TOTAL 1906			17,822	3,90,672	11,187,407	3,22,82,988	1,126,121	1,57,09,661	44,704	6,28,354	153,435	18,63,736		
TOTAL 1905			17,908	4,09,652	10,202,501	2,89,96,878	1,232,703	1,85,70,830	46,167	6,32,423	151,396	18,36,145		
INCREASE			...	...	...	32,90,110	...	...	...	...	2,037	26,591
DECREASE			86	9,970	...	...	106,581	28,61,385	1,373	4,089	...	...

DIX 17.

earnings therefrom during the calendar year 1908.

and is therefore not the same as the total production].

III.								IV.		V.								NUMBER.	
COTTON.								Chemicals, excepting saltpetre.		DRUGS.									
MANUFACTURED.										1. Intoxicating, other than opium.		2. Non-INTOXICATING.				TOTAL.			
(a) Piece-goods, European.		(d) Piece-goods, Indian.		(e) Others.		TOTAL.						(a) Medicinal preparations.		(b) Others.					
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Main head.	
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.		
9,335	1,04,331	7,193	1,06,306	...	...	50,231	6,74,808	346	5,264	50	1,002	...	...	1,394	17,004	1,460	18,006	1
14,485	3,01,859	22,705	3,60,906	1,091	22,006	227,007	29,97,016	759	14,489	40	1,067	30	797	2,946	42,263	2,925	44,107	2	
23,484	2,63,193	2,663	22,597	...	...	34,796	3,30,799	1,160	12,001	98	1,306	40	706	1,360	17,764	1,507	19,836	3
61,660	16,41,285	9,910	1,07,163	3,307	57,029	163,163	20,67,080	0,364	1,04,676	132	1,914	781	31,708	2,387	40,049	3,290	73,670	4	
34,804	9,49,139	17,012	3,28,881	1,560	37,088	447,831	1,04,66,469	08	38,504	225	6,156	276	10,761	2,216	49,897	2,718	66,814	5	
7,482	1,01,790	10,581	1,16,060	94	1,26 9	77,792	7,61,614	156	3,211	1	20	346	9,603	2,670	31,546	3,229	41,070	6	
3,074	46,946	1,167	16,504	60	626	19,005	1,89,682	198	2,654	83	492	117	2,326	964	7,647	1,103	10,405	8	
19,071	4,99,450	37,774	8,00,800	1,548	33,615	162,031	24,39,016	5,408	74,367	308	7,186	761	20,172	8,164	1,20,312	9,323	1,47,090	9	
7,360	64,316	5,690	46,485	361	3,216	59,600	3,22,249	181	1,661	113	2,707	126	1,336	664	8,600	1,003	12,712	10	
2,315	22,018	549	4,473	11	119	6,408	63,269	325	2,362	6	123	83	1,242	511	3,681	603	5,046	11	
17,471	1,76,400	0,086	55,235	378	4,706	31,823	3,27,430	1,649	4,464	68	1,478	138	1,376	20,259	96,350	20,465	96,213	12	
632	3,473	71	583	...	...	762	4,300	441	3,682	1	2	...	2	466	6,861	467	6,665	13
694	6,422	1,658	10,074	7	71	35,867	1,74,661	53	690	26	319	73	642	92	623	190	1,363	14	
6,398	1,00,002	821	10,006	6	143	16,208	2,16,701	128	3,067	...	...	92	2,226	273	3,936	365	6,062	15
...	16
...	...	...	...	...	...	191	2,332	...	...	400	4,106	...	...	...	...	400	4,106	17
965	16,631	1,399	19,273	17	278	37,260	4,64,908	20	213	5	118	16	304	53	637	73	1,069	18	
1,215	10,367	3,028	19,644	47	498	22,730	1,10,788	67	734	9	130	30	463	277	2,640	316	3,168	19	
300	1,268	470	2,186	...	...	2,937	13,361	21	245	...	...	29	310	365	1,513	367	1,629	20
40	206	164	630	3	14	2,017	16,563	0	45	163	293	9	35	10	20	162	350	21	
14,297	3,41,107	19,614	3,03,743	1,139	26,471	138,340	21,54,674	312	6,609	142	2,890	93	846	1,896	34,819	2,071	32,566	22	
768	3,629	2,221	13,091	63	641	6,635	32,681	77	643	27	392	21	331	1,440	8,091	1,468	9,344	23	
8,242	1,11,402	4,502	38,861	325	2,317	59,677	4,49,109	118	2,627	104	934	906	7,413	1,088	10,493	2,007	18,842	24	
4,563	67,861	5,094	75,172	509	0,983	131,206	8,19,896	733	8,142	40	639	189	2,952	430	5,119	604	6,700	25	
220	1,662	362	2,924	5	45	2,494	12,078	...	1	3	42	...	...	48	336	51	378	26
...	27
279	1,167	300	871	17	54	10,234	27,201	23	71	...	...	2	11	60	147	52	159	28
...	29
68	210	261	776	30
176	3,660	75	1,495	25	805	269	5,990	7	179	2	52	40	1,064	111	960	159	2,066	31	
76	107	7	17	...	...	103	176	1	1	...	...	...	...	4	14	4	14	32
14	11	14	16	...	...	217	200	2	2	...	...	...	...	12	8	12	8	33
219	367	219	867	34
64	141	64	141	35
...	13	136	8	62	8	62	...	36
369	10,143	86	2,974	26	695	621	17,671	70	1,209	42	1,285	112	2,634	...	37
...	38
...	39
340,219	47,86,907	160,224	26,17,648	10,599	1,98,382	1,735,492	2,57,52,848	10,988	2,91,714	3,110	33,369	4,236	97,776	50,406	5,10,980	50,812	6,42,095		
246,698	49,84,388	149,606	23,66,866	8,967	1,86,879	1,628,282	2,84,06,467	15,611	2,68,620	3,221	37,602	3,706	92,721	51,421	5,29,446	57,360	6,68,673		
...	...	16,469	271,183	1,948	12,473	...	...	4,877	33,094	...	...	631	6,062	...	...	...	...
5,874	99,476	...	...	...	...	92,890	26,63,699	...	...	111	4,133	...	...	958	17,406	598	16,677	

Principal commodities carried by railways and the

[The total quantity of each commodity represents the total weight conveyed over all railways in India]

VI	
DYES AND TANS.	
Railway system, vide Appendix 39.	
(1) Alizarine and aniline dyes.	
(2) Cutch.	
(3) Indigo	
(4) Myrabolams.	
(5) Tanning bark.	
(6) Turmeric.	
(7) Others.	
TOTAL.	
Quantity.	Earnings.
Quantity.	Earnings.
Quantity.	Earnings.
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Quantity.	Earnings.
Quantity.	Earnings.
Quantity.	Earnings.
Quantity.	Earnings.
Quantity.	Earnings.
Quantity.	Earnings.
Quantity.	Earnings.
Quantity.	Earnings.
Quantity.	Earnings.
Quantity.	Earnings.
Quantity.	Earnings.
Quantity.	Earnings.
Quantity.	Earnings.
Quantity.	Earnings.
Quantity.	Earnings.
Quantity.	Earnings.
Quantity.	Earnings.
Quantity.	Earnings.</

DIX 17—continued.

earnings therefrom during the calendar year 1906.

and is therefore not the same as the total production.]

VII						VIII.		(IX.—continued on following page.)								Number.	
FODDER.						Fruits and vegetables, fresh.		GRAIN AND PULSES.								Main head.	
(1) Oil-cake.		(2) Hay, straw and grass.		Total.		Quantity.	Earnings.	(1) Grain and pulse.		(2) Jowar and Bajra.		(3) Rice in the husk.		(4) Rice not in the husk.			
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.			Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.		Quantity.	Earnings.
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.		
5,137	23,520	6,910	34,984	11,777	53,510	7,508	59,702	89,313	7,52,591	3,851	17,390	160,315	7,24,030	333,731	23,05,501	1	
11,690	81,370	128,628	7,19,614	141,324	7,95,434	30,379	1,61,206	103,507	5,80,784	20,35	1,30,194	7,860	30,436	55,501	3,61,790	2	
12,460	29,184	22,840	32,141	33,209	61,625	9,435	30,829	49,433	1,73,040	...	...	273,811	9,19,785	305,504	8,94,241	3
38,009	1,91,411	36,009	89,308	70,709	2,48,772	9,729	1,37,247	259,620	17,31,061	870	2,67,824	24,824	3,40,771	313,801	13,50,568	4	
23,843	1,37,070	71,358	4,38,707	98,201	5,75,567	17,787	1,75,187	301,075	20,42,048	249,608	17,63,611	2,100	8,800	112,301	7,61,566	5	
12,213	54,100	3,317	11,020	15,500	64,720	10,047	1,04,707	90,440	6,21,914	118,17	7,52,361	140,577	6,34,392	210,239	9,45,785	6	
911	5,204	2,788	14,648	3,693	19,910	2,726	10,455	24,786	103,191	5,816	1,01,635	1,07	6,060	20,533	1,30,803	7	
11,270	51,304	89,004	3,48,413	1,00,304	3,59,077	20,27	2,01,500	466,948	37,40,352	177,63	11,05,610	49,068	1,85,600	195,516	13,02,869	8	
4,973	18,073	23,703	60,309	28,683	87,282	10,250	43,901	81,116	3,12,769	37,728	1,47,909	12,000	72,800	31,609	1,30,251	10	
2,153	9,103	1,100	5,718	3,318	14,880	1,325	6,417	4,757	30,504	...	...	18,757	50,378	185,251	6,37,915	11
7,677	33,083	4,249	14,165	11,917	48,448	22,031	71,332	10,309	4,02,020	18,242	1,00,193	64,810	2,61,600	219,806	8,94,613	12	
150	2,147	447	1,353	606	3,470	25	144	2,550	8,110	...	...	2,835	4,153	16,283	59,705	13
871	4,876	3,153	11,492	4,324	16,278	4,778	22,275	7,048	19,940	19,688	53,850	324	1,183	10,874	39,195	14	
1,706	9,784	883	4,316	2,649	14,100	31,075	2,32,120	25,738	1,81,731	1,414	16,874	55,516	24,90,750	83,816	4,62,761	15	
...	16
...	1,511	10,785	17,162	78,421	...	17
2,820	11,173	105	449	2,925	11,621	721	6,201	12,286	82,100	39,601	2,03,380	71	171	14,283	70,277	8	
163	583	10,294	23,000	10,457	24,255	1,309	7,323	17,778	94,876	89,921	4,71,649	5,267	17,350	46,915	2,09,725	18	
690	1,417	89	910	775	1,727	806	2,431	3,272	0,513	227	508	5,881	7,797	17,845	42,315	9	
42	73	71	222	116	293	176	434	1,324	1,509	457	733	16	35	207	508	19	
5,333	21,089	125,123	5,93,931	130,453	5,27,011	30,874	2,67,582	167,947	17,51,016	82,920	6,87,810	2,709	24,137	59,785	3,91,452	2	
447	1,384	6,349	17,263	6,795	18,657	4,130	20,495	34,803	85,063	4,530	12,771	8,000	37,740	10,234	31,540	20	
42,187	1,33,424	650	3,491	42,843	1,30,910	31,434	1,73,331	61,601	2,83,815	37,623	2,12,622	123,027	4,00,317	141,340	5,06,255	21	
9,227	32,040	17,643	73,174	26,770	1,06,410	11,603	75,423	59,801	3,50,243	119,000	7,68,015	13,813	53,460	72,793	6,01,537	22	
15	51	654	2,432	669	2,483	111	644	1,684	5,213	60	103	4	17	771	3,005	23	
...	24
89	213	7	13	90	226	41	131	4,285	9,790	6,416	13,954	136	280	1,253	2,826	25	
...	26
...	...	...	...	...	...	6	17	207	508	2,503	8,631	...	...	852	2,475	27
100	1,110	421	3,934	524	5,064	323	5,039	1,835	10,039	45	382	19	135	593	5,711	30	
1	3	16	32	17	35	80	97	73	155	1	1	827	1,174	4,814	8,198	1	
25	23	2	2	27	25	23	20	400	804	...	...	1,031	747	1,180	986	1
...	...	...	...	...	...	...	...	524	844	...	...	...	...	...	...	20
7,423	2,002	5	6	1,428	2,007	1,790	1,519	19	28	...	...	3,394	3,470	106	118	32
971	2,010	...	...	971	2,010	...	...	283	1,260	...	...	466	2,343	...	...	33
53	553	10	148	63	701	92	1,967	1,335	13,790	...	...	14	137	12,078	1,43,301	35
...	36
...	37
...	38
199,764	8,74,291	659,681	24,10,478	759,435	32,68,781	277,463	18,58,885	1,980,490	1,39,42,142	1,142,260	69,03,255	1,57,1361	55,33,534	2,506,492	1,24,75,853		
195,031	8,31,663	810,918	13,85,067	514,944	21,88,720	276,655	18,30,752	1,091,088	1,06,59,253	1,160,333	89,53,638	1,300,769	58,00,665	2,049,109	1,11,30,426		
4,733	40,628	238,748	10,01,410	243,481	11,02,044	796	19,133	288,611	30,82,987	...	...	200,502	6,53,929	457,354	13,45,427	
...	...	...	...	...	...	...	...	...	...	27,083	10,61,383	...	...	...	...

Principal commodities carried by railways and the

[The total quantity of each commodity represents the total weight conveyed over all railways in India]

NUMBER.		Railway system, vide Appendix 3.	IX										HIDES	
			GRAIN AND PULSE--concl.											
Main head.	Sub-head.		(5)		(6)		(7)		TOTAL.		(a)			
			Wheat.		Wheat flour.		Others.				Dressed or tanned.			
			Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.		
			Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.		
5' 0" gauge.														
1	(a), (b) & (c)	Bengal-Nagpur	59,105	5,29,858	4,914	39,970	6,750	21,504	648,569	47,71,020	...	...
2	(a), (c) to (f) & (m) & (v)	Bombay, Baroda and Central India	68,610	3,21,709	6,615	55,640	13,804	71,454	282,543	15,55,007	11	89		
3	...	Eastern Bengal State	2,158	7,156	11,341	87,692	5,794	19,781	647,770	20,01,049	25,735	1,40,027		
4	...	East Indian	283,902	22,75,257	51,445	4,37,791	77,197	4,30,718	1,120,962	68,35,950	564	8,366		
5	...	Great Indian Peninsula	175,015	13,85,206	24,231	2,15,317	19,212	3,58,958	916,832	71,35,025	76	1,012		
6	(a) to (d)	Madras	3,318	17,639	5,616	27,806	61,897	3,88,695	642,024	32,01,482	1,303	12,904		
8	(a) & (b)	Nizam's Guaranteed State	2,654	13,063	1,662	9,938	1,310	6,329	105,298	4,84,067	1	14		
9	...	North Western State	1,159,854	1,22,01,139	69,394	2,47,062	96,589	5,91,845	2,214,972	1,95,93,610	153	949		
10	...	Oudh and Rohilkhand State	127,173	7,90,858	13,692	69,097	96,323	4,70,253	400,491	19,63,206	...	...
3' 3 1/2" gauge.														
11	...	Ayaz-Bengal	46	267	1,339	13,178	14	580	210,844	7,34,828	...	...
12	...	Bengal and North-Western	12,720	3,03,114	4,213	39,140	228,657	11,91,141	704,694	31,90,165	8	40		
13	...	Berhul-Doonah	1	8	564	3,060	1,012	3,693	25,841	70,919	177	1,202		
14	...	Bhavnagar-Gondal-Junagad-Portbandar	5,632	17,240	266	1,118	8,159	21,643	62,063	1,56,283	6	17		
15	...	Burma	2,619	13,110	7,844	68,976	5,230	43,845	712,707	35,71,037	53	589		
16	...	Deoghut . . . . .	...	...	...	...	...	...	...	...	...	...
17	...	Dibru-Sadiya . . . . .	...	...	...	...	462	3,417	19,105	92,653	...	...
18	(c)	Hyderabad-Godavari Valley	7,772	60,013	204	1,390	339	1,495	74,556	4,85,830	...	...
19	...	Jodhpur-Bikaner	67,852	3,34,706	154	3,577	45,827	2,21,967	274,624	13,53,239	4	37		
20	(c) to (h)	Madras	181	780	761	6,091	5,558	28,105	34,685	32,470	10	37		
21	...	Morvi	518	755	57	141	692	1,200	3,361	6,320	...	...
22	(b) & (g) to (m)	Rajputana-Malwa	170,398	15,76,757	7,505	57,140	177,237	15,93,326	674,601	59,89,283	190	603		
23	(a) & (b)	Rohilkund and Kumaon	39,028	69,728	1,678	4,881	41,327	1,13,705	132,373	3,44,620	...	...
24	...	South Indian	551	2,688	2,231	11,212	23,312	1,22,067	389,604	16,07,066	1,000	14,456		
25	...	Southern Mahratta	13,187	79,563	5,665	43,391	21,369	1,01,614	300,409	20,21,112	93	433		
26	...	Udaipur-Chitor	3,410	14,479	94	453	2,302	8,193	8,215	31,563	...	...
2' 6" gauge.														
27	...	Barnaul-Basirhat Light . . . . .	...	...	...	...	...	...	...	...	...	...
28	...	Barsi Light	1,173	2,515	14	40	28	71	13,385	29,531	...	...
29	...	Bukhtiar-pore-Bihar Light . . . . .	...	...	...	...	...	...	...	...	...	...
30	...	Cutch	316	1,008	16	45	314	1,080	4,268	19,814	...	...
31	...	Kalka-Simla	1,020	7,704	1,709	16,189	1,196	7,851	6,351	54,000	...	...
32	(c)	Mourbhauj	1	3	35	59	1	4	5,752	9,594	...	...
33	(d)	Parlakimedi Light	19	15	10	0	345	219	5,073	2,370	...	...
34	(e)	Powayan Light	1,648	2,046	...	...	3,136	3,091	5,308	6,581	...	...
35	...	Tarakeshwar-Nagra Light . . . . .	...	...	126	139	...	...	3,555	3,761	...	...
36	...	Tesporo-Balipara Light . . . . .	...	...	...	...	...	...	749	3,603	...	...
2' 0" gauge.														
37	...	Darjeeling-Himalayan	2	31	1,437	23,900	341	5,095	15,907	1,86,344	...	...
38	...	Howrah-Amra Light . . . . .	...	...	...	...	...	...	...	...	...	...
39	...	Howrah-Sheakhnals Light . . . . .	...	...	...	...	...	...	...	...	...	...
40	...	Jorhat . . . . .	...	...	...	...	...	...	...	...	...	...
TOTAL 1906			3,259,163	2,00,01,505	225,730	15,15,751	975,707	58,31,755	10,660,102	6,73,92,858	29,363	1,81,654		
TOTAL 1905			2,573,394	2,46,35,824	181,901	11,55,504	953,275	51,35,180	9,979,818	6,71,50,822	30,069	1,63,409		
INCREASE			...	...	43,829	3,59,247	22,432	3,96,575	680,284	1,42,036	...	19,245	
DECREASE			314,231	46,34,319	...	...	...	...	...	...	706	...	

DIX 17—continued.

earnings therefrom during the calendar year 1906.

and is therefore not the same as the total production.]

X								XI.		XII.		XIII.								Main head.
HIDES AND SKINS.								Horns.		Hemp (Indian) and other fibres excluding jute.		JUTE.								
(1) OF CATTLE.		(2) SKINS OF SHEEP AND OTHER ANIMALS.				TOTAL.						(1) Raw.		(2) Gunny bags and cloth.		TOTAL.				
(b) Raw.		(a) Dressed or tanned.		(b) Raw.																
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.					
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.					
11,491	1,25,541	...	...	...	...	11,491	1,35,541	406	3,292	8,305	54,175	16,137	57,941	22,820	2,17,245	30,263	2,75,086	1
1,059	16,360	3	61	2,890	36,356	4,533	52,806	173	2,207	2,103	29,994	375	5,810	11,818	76,916	12,193	82,726	2		
...	...	2,401	13,318	...	...	28,191	1,53,345	302	780	12,033	37,200	829,188	60,37,633	23,835	70,633	859,023	61,08,466	3
40,174	9,02,027	425	6,427	13,759	1,91,651	54,922	9,01,471	163	9,645	29,016	2,24,536	157,917	8,06,471	63,517	7,00,910	211,464	15,60,484	4		
8,983	1,21,431	53	2,089	17,630	2,32,936	20,745	3,58,117	1,535	20,420	11,210	1,36,230	1,21	13,790	29,006	2,67,248	31,176	3,11,044	5		
6,305	51,374	3,507	41,936	34,362	3,06,036	45,407	4,11,918	966	8,120	7,418	60,303	148	1,030	18,161	1,33,670	18,309	1,34,718	6		
911	9,542	...	3	2,738	24,308	3,860	33,865	223	1,736	792	5,415	11	133	2,919	21,949	2,330	21,981	7		
10,686	1,42,513	178	2,137	17,365	1,99,070	34,372	3,70,005	287	2,309	607	6,150	73	991	54,392	4,43,133	53,403	4,44,427	8		
6,153	44,864	...	...	4,180	18,698	10,333	63,562	643	2,490	16,037	30,422	172	1,997	9,702	48,436	9,871	49,533	9
...	10	
648	11,201	...	...	29	325	877	11,016	7	128	323	1,461	92,439	2,21,088	784	4,054	96,223	2,25,742	11
9,039	63,301	17	165	3,349	20,732	13,313	84,328	125	764	6,977	42,150	7,035	39,188	16,700	90,701	24,134	1,35,062	12		
...	...	6	25	...	...	183	1,227	...	...	...	...	10,772	47,900	126	165	10,497	48,355	13
208	1,235	17	190	624	3,709	854	6,151	5	29	1	5	...	...	1,698	6,690	1,098	6,036	14
3,161	34,108	2	23	61	470	3,267	35,175	43	622	7	70	15	242	16,193	63,879	15,308	64,100	15		
...	16	
...	17	
381	5,316	...	...	850	9,181	1,231	14,407	42	526	141	1,474	3	24	2,837	24,054	2,840	24,078	18
470	4,419	...	16	1,099	9,108	1,673	13,609	1	9	67	207	10	51	1,626	17,232	4,630	17,333	19		
76	107	51	105	1,068	2,285	1,205	2,624	12	31	535	1,883	1	1	704	1,081	705	1,082	20		
39	126	4	9	60	205	103	343	3	8	14	58	...	...	108	450	166	429	21
3,737	43,824	10	142	6,563	69,100	10,410	1,12,069	111	1,111	2,820	18,321	568	5,490	16,581	1,12,100	17,989	1,17,699	22		
893	4,412	...	...	469	1,009	1,362	6,410	65	445	2,014	8,666	7	27	2,032	9,644	2,930	9,671	23
4,194	35,230	1,305	21,416	8,715	56,078	15,364	1,27,180	227	1,781	3,715	29,093	135	1163	11,540	63,628	11,975	64,711	24		
1,906	16,927	230	1,184	11,411	80,721	13,739	98,568	407	4,364	1,563	14,265	4	35	8,011	55,994	9,615	55,910	25		
112	688	...	1	158	766	208	1,455	...	2	3	15	1	4	204	935	205	939	26		
...	27	
...	28	
77	211	...	...	86	236	163	447	5	15	21	57	...	2	1,123	3,609	1,423	3,611	29
...	30	
...	31	
89	420	...	1	23	209	62	681	...	6	14	235	1	24	125	1,305	126	1,410	32		
3	8	...	...	...	...	3	8	...	...	...	...	1	3	137	231	138	234	33
305	266	...	...	...	...	305	266	1	1	...	...	5	4	40	53	54	57	34
...	474	966	35	
...	1,506	1,949	1,506	1,949	...	36	
...	37	
259	3,311	...	...	6	83	265	3,394	7	136	...	7	1	43	142	1,853	143	1,906	38
...	39	
...	40	
...	41	
119,131	14,68,019	8,338	88,645	127,463	12,57,915	384,315	29,97,127	6,649	61,292	101,142	6,04,156	1,121,575	72,42,064	311,180	25,35,805	1,432,765	97,77,889	42		
91,627	10,33,132	10,038	1,15,655	111,056	11,10,489	346,875	24,27,612	5,021	55,826	92,810	6,08,063	1,027,320	64,66,430	316,315	26,93,974	1,343,635	91,42,404	43		
27,604	4,35,791	...	...	15,537	1,41,486	40,440	5,09,615	1,028	5,466	8,338	80,093	94,255	7,63,654	...	...	89,120	6,35,485	44
...	...	2,295	27,010	5,135	1,49,169	45	

Principal commodities carried by railways and the earnings

[The total quantity of each commodity represents the total weight conveyed over all railways in India]

NUMBER.		Railway system, <i>vide</i> Appendix 38.	XIV.		XV.						(1) Ale and beer.		(2) Wines and spirits of all kinds including country spirit.	
Main head.	Sub-head.		Lac.		LEATHER.									
					(1) Unwrought.		(2) Wrought, excepting boots and shoes.		Total.					
			Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
			Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
1	(a), (b) & (c)	Bengal-Nagpur	7,713	72,108	1,230	8,701	...	...	1,230	8,701	708	2,454	1,677	10,555
2	(d), (e) to (f) & (n) & (o).	Bombay, Baroda and Central India	206	1,776	1,160	14,321	685	13,039	2,051	28,200	1,547	14,242	4,166	33,578
3	...	Eastern Bengal State	1,278	9,800	68	172	41	145	102	317	341	3,074	945	14,176
4	...	East Indian	21,013	3,82,053	1,410	46,424	932	21,569	2,342	70,033	7,141	50,520	2,610	80,122
5	...	Great Indian Peninsula	720	9,004	977	13,817	1,253	31,355	2,240	45,172	9,088	1,18,341	9,322	1,18,210
6	(a) to (d)	Madras	165	1,153	4,217	54,961	4,313	48,441	8,550	1,03,443	4,223	41,160	6,363	46,107
8	(a) & (b)	Nizam's Guaranteed State	9	58	1,235	17,558	118	1,136	1,353	18,694	1,702	16,676	690	7,596
9	...	North Western State	1,735	25,938	2,715	34,644	1,643	40,432	4,408	76,076	7,649	97,243	6,418	1,24,216
10	...	Oudh and Rohilkhand State	979	6,500	...	...	182	1,740	182	1,740	5,122	19,696	2,035	24,555
3' 3 1/2" gauge.														
11	...	Assam-Bengal	742	7,117	...	...	2	34	3	38	151	1,310	493	2,004
12	...	Bengal and North-Western	2,176	15,268	138	461	98	1,113	236	1,574	58	447	301	3,317
13	...	Bengal-Doon	1	30	...	...	...	...	...	...	...	20	27	258
14	...	Ghaznagar-Gondal-Jaunagar-Patna dar	23	60	712	1,674	40	544	312	1,018	25	145	151	1,102
15	...	Barma	1,903	21,656	38	542	56	1,022	94	1,564	2,610	31,321	897	13,412
16	...	Deaghar . . . . .	...	...	...	...	...	...	...	...	...	...	...	...
17	...	Dhen-Saliga . . . . .	...	...	...	...	...	...	...	...	...	...	...	...
18	(c)	Hyderabad-Godavari Valley	17	163	19	180	71	1,318	90	1,528	20	118	30	415
19	...	Jodhpur-Bikaner	368	1,900	160	1,417	145	1,787	394	3,204	113	908	57	856
20	(c) to (h)	Madras . . . . .	...	6	28	113	10	40	38	163	1,731	2,812	337	2,076
10	...	Morvi	4	15	...	...	16	40	10	41	3	5	3	8
2	(b) & (g) to (m).	Rajputana-Malwa	631	5,629	728	7,942	796	7,102	1,124	15,944	2,506	17,046	1,503	22,743
20	(a) & (h)	Rohilkhand and Kumaon	222	912	6	38	34	298	39	246	1,130	6,236	157	2,308
21	...	South Indian	105	1,113	13	100	24	312	37	412	463	2,703	4,009	28,236
22	...	Southern Mahratta	64	830	1,053	10,311	86	856	1,139	11,147	1,671	14,310	2,777	20,340
23	...	Udaipur-Chitor	2	14	11	65	5	42	10	97	...	1	6	67
2' 6" gauge.														
24	...	Baraset-Basrhat Light . . . . .	...	...	...	...	...	...	...	...	...	...	...	...
25	...	Barso Light . . . . .	...	2	...	2	10	45	10	48	...	...	10	38
26	...	Bukhtnagar-Bihar Light . . . . .	...	...	...	...	...	...	...	...	...	...	...	...
27	...	Cutch . . . . .	...	...	4	11	...	...	4	11	...	...	...	...
30	...	Kalka-Simla . . . . .	...	1	3	63	21	567	21	630	1,653	11,937	148	3,424
1	(c)	Mourbhauj	1	3	...	1	...	...	...	1	...	1	8	27
1	(d)	Parlakimedi Light . . . . .	...	...	2	2	...	...	2	2	1	1	68	63
20	(e)	Powayan Light . . . . .	...	...	...	...	...	...	...	...	...	...	...	...
31	...	Tarakeshwar-Magra Light	10	18	...	...	...	...	...	...	...	...	...	...
33	...	Tespore-Ballpara Light . . . . .	...	...	...	...	...	...	...	...	...	...	20	126
2' 0" gauge.														
35	...	Darjeeling-Himalayan	6	97	...	...	6	194	6	194	511	5,159	201	6,022
36	...	Howrah-Anta Light . . . . .	...	...	...	...	...	...	...	...	...	...	...	...
37	...	Howrah-Shoakhala Light . . . . .	...	...	...	...	...	...	...	...	...	...	...	...
39	...	Jorhat . . . . .	...	...	...	...	...	...	...	...	...	...	...	...
TOTAL 1906			42,404	5,63,477	15,533	2,16,543	10,460	1,73,070	25,993	3,90,210	40,551	4,77,517	40,708	5,69,789
TOTAL 1905			44,140	5,52,436	11,936	1,70,520	9,234	1,81,545	21,170	3,62,065	51,171	5,24,723	41,181	5,67,335
INCREASE			...	11,041	3,597	46,023	1,226	...	4,823	28,154	...	...	4,717	...
DECREASE			1,736	...	...	...	...	17,869	...	...	1,620	47,306	...	17,446

DIX 17—continued.

therefrom during the calendar year 1906.

and is therefore not the same as the total production.]

XVI.				XVII—(cont'd on following page).																Number.	
LIQUORS.				METALS.																Main head.	
(3) All other sorts, including toddy and fermented liquor other than ale and beer.		Total.		(1) Brass, unwrought.		(2) Brass, wrought.		(3) Copper, unwrought.		(4) Copper, wrought.		(5) IRON AND STEEL.									
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	(a) Cast.	(b) Unwrought.	(c) Wrought.					
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.				
...	...	2,385	19,109	...	...	1,980	21,000	...	...	223	2,867	...	...	875	7,195	...	...	1
1,821	9,405	7,544	58,263	1,300	17,204	806	11,497	353	4,053	612	8,414	1,382	18,342	501	6,433	25,456	2,84,809	2			
...	...	1,280	17,850	1,281	7,315	3,021	21,943	152	472	302	1,490	270	1,108	750	2,433	50,128	2,74,126	3			
6-0	4,144	10,341	1,43,786	2,250	20,023	8,244	96,210	102	1,522	787	13,812	8,783	80,146	61,000	1,33,186	74,200	8,52,021	4			
27	114	19,037	2,31,704	3,078	4,840	2,324	42,197	850	17,492	1,201	20,117	2,815	47,574	4,220	53,199	64,609	10,93,025	5			
5,230	30,514	16,413	1,20,781	247	2,829	1,848	19,103	72	760	406	4,101	308	4,122	1,910	16,246	16,925	1,52,742	6			
1,001	8,216	4,083	32,508	232	1,917	249	2,635	332	2,059	49	643	125	1,219	2,643	19,106	2,548	27,422	8			
548	8,098	13,015	2,20,407	600	10,234	2,210	31,168	418	5,608	800	10,754	2,134	50,392	4,317	37,499	51,618	8,25,569	9			
...	...	7,157	48,151	400	573	3,104	19,760	3	30	228	1,506	953	5,023	17	111	15,941	75,310	10			
...	...	641	4,223	...	2	215	1,927	...	...	3	31	16	83	1	11	4,185	27,732	11	
...	...	359	3,764	105	1,563	1,822	13,702	6	66	85	979	1,039	8,072	578	2,641	9,108	69,593	12			
...	...	27	278	...	1	14	00	...	...	1	2	...	...	...	...	1,367	12,358	13
...	...	170	1,847	307	913	272	1,552	122	612	55	573	306	1,280	245	926	1,427	8,212	14			
23	530	3,439	45,563	46	424	218	3,190	38	245	35	480	706	4,545	447	2,034	7,601	52,120	15			
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	16
...	...	69	1,048	...	...	...	...	...	...	...	...	1,395	32,994	...	...	...	...	17
655	3,456	714	3,990	28	223	180	2,398	2	23	19	210	121	1,136	847	8,344	2,338	25,203	18			
27	162	197	1,986	19	146	100	1,418	1	17	125	674	1,085	13,561	152	702	2,530	14,779	19			
48	284	1,521	6,828	2	13	37	170	8	68	31	222	65	614	18	18	992	5,803	20			
24	93	30	106	2	8	21	90	...	3	4	15	12	44	...	...	150	694	21	
212	2,730	4,027	43,119	1,330	26,613	2,605	20,498	304	8,143	374	5,162	703	9,908	1,644	6,761	18,324	1,81,344	22			
1	5	1,327	8,609	91	451	468	2,755	4	27	49	280	68	324	126	653	4,041	20,150	23			
523	1,847	4,082	32,780	877	6,522	948	10,564	65	451	106	1,711	939	16,221	2,124	13,007	7,539	60,055	24			
423	41,010	12,671	76,520	150	1,760	987	9,604	88	1,046	443	1,581	752	5,315	5,153	28,866	6,588	55,706	25			
...	...	0	58	...	...	9	00	2	8	...	33	7	20	16	280	134	1,375	26	
...	27		
...	...	10	38	3	10	49	153	2	6	33	104	2	7	3	0	1,651	2,726	28			
...	29		
...	5	17	4	14	30		
21	516	...	15,906	3	31	26	456	1	10	33	762	227	3,961	257	3,500	464	7,516	31			
...	...	8	29	...	...	13	35	...	...	...	...	8	16	...	...	97	406	32
...	...	69	54	...	...	4	5	...	...	...	...	11	17	...	...	119	101	33
...	187	462	34		
...	98	98	4	8	35		
...	...	20	120	26	102	36		
...	...	742	11,181	...	...	33	745	...	...	8	208	38	916	3	57	504	11,255	37
...	38		
10,867	111,991	115,310	11,50,297	12,630	1,63,734	31,041	4,35,747	2,050	44,246	6,120	79,099	28,310	2,94,940	87,770	1,35,884	110,077	42,70,909	39			
14,661	67,294	100,913	11,79,252	13,401	1,00,354	30,808	4,42,144	4,552	70,150	8,008	108,544	37,438	3,40,205	80,440	1,27,589	330,860	34,93,404	40			
5,208	44,097	8,363	...	...	...	633	...	...	...	...	...	...	...	...	...	73,217	7,77,585	41
...	...	...	19,955	771	38,520	...	6,397	1,803	25,920	1,888	28,546	9,089	45,340	6,627	91,458	...	...	42

Principal commodities carried by railways and

[The total quantity of each commodity represents the total weight conveyed over all railways in India]

NUMBER.		XVII.								XVIII.							
		METALS—concluded.								Oils.							
		(5) Iron and steel —concluded.		(6) Others.		Total.		(1) Kerosine.		(2) Castor.		(3) Cocunut.		(4) Mustard and rapo.			
		(d) Manufactures.															
Main head.	Sub-head.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.		
5' 0" gauge.		Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.		
1	(a), (b) & (c), Bengal-Nagpur ...	3,663	60,503	127,722	6,85,765	471,850	9,34,252	20,821	2,92,342	2,856	23,504	1,125	8,300	...	...
2	(a), (c) to (f) & (n) & (o), Bombay, Baroda and Central India ...	27,411	3,96,759	60,411	2,50,906	118,437	10,18,550	10,637	268,783	1,673	17,175	657	8,679	853	8,034		
3	... Eastern Bengal State ...	7,793	39,627	10,571	37,339	74,319	3,85,853	149,649	342,875	145	875	1,119	10,617	8,100	50,197		
4	... East Indian ...	28,156	3,80,323	7,930	1,36,855	192,711	17,11,845	99,963	7,51,902	1,068	20,422	2,370	21,098	10,672	1,20,241		
5	... Great Indian Peninsula ...	26,221	3,85,641	2,06,600	22,25,422	1,55,904	79,11,015	62,502	8,92,118	1,272	17,494	2,677	49,009	73	449		
6	(a) to (d), Madras ...	16,821	1,58,497	2,511	23,640	16,839	3,82,170	39,142	2,84,400	3,313	12,364	4,188	35,551	24	179		
8	(a) & (b), Nizam's Guaranteed State ...	1,441	12,962	540	6,717	7,821	71,770	5,652	40,209	321	2,234	149	1,752	1	26		
9	... North Western State ...	17,001	2,78,225	5,079	65,316	81,632	11,20,516	29,566	5,86,569	614	7,687	1,345	18,064	2,417	2,194		
10	... Oudh and Rohilkhand State ...	1,417	27,011	1,007	5,517	2,420	1,34,978	19,719	92,118	113	698	42	355	514	3,900		
3' 3 1/2" gauge.																	
11	... Assam-Bengal ...	1,120	14,750	1,000	15,773	7,212	50,919	13,431	4,44,607	36	339	82	879	1,099	10,007		
12	... Bengal and North-Western ...	6,777	4,84,418	5,167	2,65,800	22,719	1,51,604	29,875	1,03,729	375	2,520	299	1,635	1,143	10,480		
13	... Bengal-Dooars ...	75	912	401	6,678	1,758	19,911	1,835	6,770	...	...	30	111	272	1,291
14	... Bhavnagar-Gondal-Jamagad-Port-Bandar ...	934	4,854	268	1,291	3,000	20,169	4,022	15,954	192	751	78	420	76	161		
15	... Barma ...	9,209	1,01,852	379	3,379	18,010	1,68,272	9,787	63,297	170	1,070	717	8,569	23	341		
16	... Deoghur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17	... Dibru-Sadiya ...	...	...	1,137	9,250	5,542	42,274	7,848	20,090	...	...	...	...	...	...
8	(c), Hyderabad Godavari Valley ...	938	10,508	204	2,809	4,685	5,1944	2,365	22,031	111	1,000	138	1,488	...	3		
18	... Jodhpur-Bikaner ...	101	2,883	512	4,113	4,885	37,531	2,681	19,861	221	1,892	47	300	5	62		
6	(a) to (h), Madras ...	399	2,206	82	733	1,625	9,117	2,034	10,101	22	74	672	1,278	...	...
19	... Morvi ...	37	150	16	62	184	1,079	269	847	13	28	0	10	5	14		
2	(b) & (g) to (m), Rajputana-Malwa ...	6,587	83,605	59,955	1,11,651	8,1900	4,53,250	11,590	19,178	884	5,802	282	3,760	501	3,002		
20	(a) & (b), Rohilkhand and Kumaon ...	369	1,671	205	1,519	5,472	29,036	7,002	7,484	34	145	9	84	108	613		
21	... South Indian ...	8,181	81,045	1,491	14,194	23,313	2,01,021	27,113	1,59,067	3,669	24,308	1,773	7,093	71	371		
22	... Southern Malabar ...	4,720	51,999	48,023	2,87,919	67,178	1,46,506	29,657	1,91,087	937	7,063	1,735	10,603	...	...
23	... Udaipur-Chitor ...	12	71	52	361	372	2,120	257	1,284	2	15	5	29	...	...
2' 6" gauge.																	
24	... Baraset-Basirhat Light ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25	... Basir Light ...	294	818	26	100	1,373	3,931	545	1,205	6	17	104	...	...	...
26	... Bukhtarpore-Bihar Light ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27	... Cutch ...	129	312	1	4	139	377	112	369	...	...	16	44	2	4
30	... Kalka-Simla ...	905	3,278	55	1,400	1,274	20,722	651	7,191	4	83	...	1	6	90		
31	(c), Mourbhanj ...	25	67	6	21	149	545	47	65	0	11	2	8	5	12		
1	(d), Parlakimedi Light ...	5	4	10	16	140	141	328	203	7	5	2	2	...	...
20	(e), Powayan Light ...	...	...	...	...	197	402	...	...	...	...	...	...	...	...
32	... Tarakeshwar-Magra Light ...	19	23	...	...	121	129	...	...	...	...	...	...	173	236
33	... Tezpur-Balipara Light ...	...	...	...	...	26	162	...	...	...	...	...	...	...	...
2' 0" gauge.																	
35	... Darjeeling-Himalayan ...	480	10,420	146	2,836	1,217	28,439	772	10,030	3	65	6	133	374	4,968		
36	... Howrah-Amta Light ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
37	... Howrah-Sheakhala Light ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
38	... Jorhat ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
TOTAL 1908		167,175	21,47,608	923,601	39,75,510	1,070,512	1,16,48,873	586,217	42,70,819	20,064	1,48,854	19,715	1,91,731	26,072	43,873		
TOTAL 1905		129,298	17,07,320	612,001	22,75,020	1,108,272	89,85,505	537,336	37,63,129	19,792	1,41,070	20,629	2,04,460	31,041	1,87,769		
INCREASE		37,877	4,40,278	311,600	16,99,601	561,740	26,63,368	48,881	5,17,690	272	7,484	...	...	8,032	56,108
DECREASE		...	...	...	...	...	...	...	...	...	...	921	12,738	...	...

DIX 17—continued.

the earnings therefrom during the calendar year 1906.

and is therefore not the same as the total production.]

XIX (continued on following page).																			Main head.
Oil-seeds.																			
(5)		Total.	(1)		(2)		(3)		(4)		(5)		(6)		(7)				
Others.			Castor.		Earthnuts.		Linseed.		Poppy.		Rape and mustard.		Til or jingill.		Cotton seed.				
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.		
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.		
8,107	24,369	38,928	3,44,575	...	...	...	...	14,579	1,29,365	...	...	6,760	41,383	28,403	2,31,803	...	...	1
8,482	31,270	20,332	2,70,547	27,600	2,41,306	1,306	12,432	5,818	53,891	13,163	93,687	19,068	1,50,991	30,004	2,26,543	...	...	2
1,785	4,815	153,043	4,08,979	1,052	1,838	...	...	11,511	30,872	10	69	23,372	84,728	924	3,331	...	...	3
3,062	60,449	110,026	9,70,147	21,745	1,66,305	216	1,584	120,918	8,11,430	36,517	2,57,382	130,117	11,27,273	20,720	1,50,259	47,367	2,98,171	4	
11,125	1,23,726	77,799	15,73,750	30,631	1,32,628	8,820	88,632	94,595	11,04,360	18,851	2,16,115	15,779	2,97,768	106,907	11,96,787	171,038	17,25,115	5	
13,358	81,509	60,543	4,13,081	85,080	97,021	3,030	17,324	16	58	172	805	891	5,921	37,163	1,55,958	...	...	6
584	5,254	6,080	55,475	53,165	2,94,589	70	577	6,975	15,433	116	578	104	550	19,523	1,19,045	5,753	27,303	8	
5,665	61,403	20,657	6,95,977	177	1,330	201	3,410	1,219	9,700	721	4,361	5,121	5,04,861	12,311	89,414	112,343	6,24,017	9	
609	3,609	21,127	1,00,830	4,637	17,547	11	529	6,388	20,831	19,912	82,232	12,911	62,352	4,157	17,292	...	...	10
151	1,320	14,779	50,008	50	74	...	4	75	160	2	11	2,170	10,713	333	1,184	16	126	11	
336	2,760	25,938	1,21,104	10,990	24,410	38	606	75,021	1,03,607	6,860	24,630	15,413	1,31,706	791	4,301	...	...	12
3	67	2,146	8,232	...	...	...	...	...	...	...	...	870	3,002	...	...	...	...	13
614	2,013	4,942	10,579	3,058	10,620	238	1,449	6	15	889	2,032	1,259	6,343	5,331	17,986	...	...	14
9,618	85,011	20,385	1,79,785	15	172	3,914	38,016	13	162	3	64	5	37	7,797	43,798	...	...	15
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	16
...	...	7,839	20,680	...	...	...	...	...	...	...	...	...	...	...	...	...	...	17
784	7,568	3,408	32,017	100	1,183	73	525	25,016	1,72,748	51	410	29	164	4,775	29,690	21,859	1,42,808	18	
525	5,733	9,770	27,548	...	3	23	132	...	1	0	20	7,189	25,210	5,079	21,696	...	...	19
1,609	4,157	5,197	15,913	339	570	68	207	...	...	...	3	9	16	915	1,631	...	...	20
71	233	304	631	5	12	3	11	...	...	3	5	3	6	608	723	2,228	3,296	21
2,879	27,709	16,190	1,31,881	22,923	53,831	1,345	15,707	4,720	27,070	15,088	1,63,057	31,071	1,82,513	28,255	1,54,638	...	...	22
103	1,082	2,755	9,439	4,114	11,880	35	241	1,223	2,661	5,224	7,654	5,550	21,625	1,211	3,165	...	...	23
16,894	63,111	40,520	2,54,406	5,551	31,400	104,515	2,00,050	4	10	48	310	1,129	6,028	23,570	1,40,820	...	...	24
4,132	29,897	35,364	2,20,249	4,543	22,215	4,473	23,061	4,047	43,121	480	4,015	517	3,561	16,435	1,21,214	17,530	82,719	25	
0	47	270	1,374	...	...	9	76	78	200	531	1,080	...	...	950	2,700	...	...	26
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	27
392	1,102	1,047	2,727	157	361	1,333	3,081	9,631	21,502	16	45	14	36	1,236	2,619	4,272	9,161	28	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	29
58	180	188	577	...	...	24	64	...	...	...	...	19	55	41	133	...	...	30
29	493	693	7,848	5	7	...	...	3	30	4	53	...	2	2	31	42	480	31
5	5	65	116	1	2	...	...	...	...	...	...	8	17	25	59	...	...	32
7	7	314	217	7	6	...	...	...	...	...	...	20	19	140	101	...	...	33
...	...	...	...	...	...	...	...	...	...	...	...	303	490	...	...	...	...	34
...	...	173	236	...	...	...	...	...	...	...	...	135	169	...	...	...	...	35
885	214	885	214	...	...	...	...	...	...	...	...	...	...	...	...	...	...	36
104	1,782	1,259	17,808	...	...	...	...	...	1	...	...	...	10	...	7	...	...	37
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	38
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	39
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	40
83,805	6,29,702	730,527	54,84,678	227,503	11,06,671	130,805	4,09,501	390,070	27,01,806	116,384	8,08,480	368,512	27,04,793	3,06,607	27,38,593	383,078	29,15,435	41	
86,884	7,18,846	6,85,772	50,05,282	199,416	10,12,963	124,906	3,70,919	423,797	31,58,420	95,895	7,12,181	957,120	24,03,737	398,836	28,61,009	380,027	29,41,904	42	
...	...	50,755	4,79,890	28,088	1,55,909	5,809	38,082	...	...	19,846	98,299	11,392	2,55,495	47,671	3,74,674	3,951	...	43
2,519	89,143	...	...	...	...	...	...	32,727	9,96,564	...	...	...	...	...	...	...	20,480	44

Principal commodities carried by railways and

[The total quantity of each commodity represents the total weight conveyed over all railways.]

NUMBER.		Railway system, code Appendix 3B.	XIX.				XX.		XXI.		XXII			
Main head.	Sub-head.		OIL-SEEDS—condensed.				Opium.	Paper and pasteboard.	PRODUCE					
			(8) Others.		Total.				(1) Dried fruits and nuts.		(2) Ghee.			
			Quantity.	Earnings.	Quantity.	Earnings.			Quantity.	Earnings.	Quantity.	Earnings.		
													Tons.	Rs.
5' 6" gauge.														
1	(a), (b) & (c).	Bengal-Nagpur	11,634	54,837	10,236	4,61,388	61	1,743	936	16,410	11,130	88,684	3,318	44,621
2	(a), (c) to (f) & (n) & (o).	Bombay, Baroda and Central India	7,497	45,756	104,702	8,17,119	2,529	62,618	8,792	94,698	14,505	1,51,079	8,333	88,201
3	...	Eastern Bengal State	2,054	10,482	38,953	1,37,361	9	178	6,428	8,789	1,413	2,847	734	5,413
4	...	East Indian	5,534	30,943	395,638	28,50,366	8,900	2,19,031	12,350	1,75,662	6,850	88,206	17,072	3,80,879
5	...	Great Indian Peninsula	12,707	68,398	167,747	49,19,809	489	29,368	3,114	50,475	38,376	6,00,040	11,668	1,65,691
6	(a) to (d).	Madras	43,492	2,78,671	126,644	5,65,851	52	1,569	1,206	16,918	8,460	48,622	5,698	62,036
8	(a) & (b).	Nizam's Guaranteed State	2,753	8,817	68,465	4,67,007	23	809	700	7,628	6,603	75,843	846	11,102
9	...	North Western State	125,682	16,96,604	302,945	24,37,206	72	610	3,850	69,201	29,080	4,97,309	11,392	1,27,294
10	...	Oudh and Rohilkhand State	20,526	81,286	67,881	2,72,063	1,834	40,906	3,082	22,123	1,492	12,306	2,508	15,905
3' 3" gauge.														
11	...	Assam-Bengal	8	41	2,654	12,313	3	37	93	672	408	3,637	246	2,349
12	...	Bengal and North-Western	5,158	25,377	144,685	6,31,785	6,391	1,03,530	3,452	8,323	1,284	16,629	3,833	36,065
13	...	Bengal-Pooars	8	17	678	3,045	...	...	19	57	3	6	22	53
14	...	Bhavnagar-Gondal-Jamnagar- Porbandar	14,549	50,484	25,154	96,140	18	181	282	1,440	2,526	10,662	1,670	10,805
15	...	Burma	447	2,992	12,192	50,111	26	471	711	11,172	1,422	11,314	908	14,521
16	...	Deoghur . . . . .	...	...	...	...	...	...	...	...	...	...	...	...
17	...	Dibrui-Sadiya . . . . .	...	...	...	...	...	...	...	...	976	6,597	...	...
18	(c)	Hyderabad-Godavari Valley	4,484	28,622	59,468	3,70,015	13	673	237	2,850	2,695	29,719	620	6,604
19	...	Jodhpur-Bikaner	34,933	1,23,137	47,230	1,70,099	29	458	93	710	2,478	11,207	6,282	63,766
6	(a) to (h).	Madras	1,950	5,028	3,251	7,374	...	...	26	127	40	170	100	707
10	...	Morvi	244	467	3,094	4,519	7	17	45	171	63	240	55	190
2	(b) & (g) to (m).	Rajputana-Malwa	7,370	38,245	113,211	5,78,721	2,300	36,661	2,722	64,293	19,205	1,48,053	10,278	1,20,320
20	(a) & (b).	Rohilkhand and Kumaon	42	112	17,404	47,637	509	12,121	83	482	387	2,107	208	1,088
21	...	South Indian	2,753	13,644	137,581	3,93,072	...	1	2,121	38,088	570	4,311	1,494	11,208
22	...	Southern Mahratta	7,065	38,177	53,169	3,37,970	2	42	659	8,552	29,421	2,07,184	4,425	36,122
23	...	Udaipur-Chitor	5	12	1,579	4,142	52	304	45	351	437	2,232	380	2,262
2' 6" gauge.														
24	...	Baraset-Buxirhat Light . . . . .	...	...	...	...	...	...	...	...	...	...	...	...
25	...	Barui Light	1,398	3,161	18,005	43,476	...	...	47	104	600	1,982	57	210
26	...	Bukhtiarpor-Bihar Light . . . . .	...	...	...	...	...	...	...	...	...	...	...	...
27	...	Cutch	40	110	127	362	...	...	4	10	168	561	6	23
30	...	Kalka-Simla	11	160	67	753	3	99	309	8,342	24	1,407	49	628
1	(c)	Mowbhanj	309	584	313	661	...	...	22	49	2	5	17	43
1	(d)	Parlakmedi Light	107	91	292	217	...	...	4	4	3	1	1	1
20	(c)	Pownyan Light . . . . .	...	...	303	489	...	...	...	...	...	...	...	...
32	...	Tarakeshwar-Nagra Light . . . . .	...	...	135	168	...	...	8	19	...	...	20	39
...	...	Tospore-Balipara Light	11	82	11	82	...	...	...	...	...	...	21	143
2' 0" gauge.														
35	...	Darjeeling-Himalayan . . . . .	...	...	...	18	...	6	101	2,708	36	715	21	347
36	...	Howrah-Amra Light . . . . .	...	...	...	...	...	...	...	...	...	...	...	...
37	...	Howrah-Sheakhola Light . . . . .	...	...	...	...	...	...	...	...	...	...	...	...
38	...	Jorhat . . . . .	...	...	...	...	...	...	...	...	...	...	...	...
TOTAL 1906			316,585	28,55,511	2,290,314	1,61,13,978	28,381	5,03,636	49,654	6,00,600	178,083	20,24,089	92,106	11,78,681
TOTAL 1905			278,918	20,68,923	2,169,710	1,63,56,564	22,884	4,72,179	42,094	5,00,689	182,666	20,57,516	93,904	11,91,251
INCREASE			38,667	8,86,588	120,604	7,57,414	497	31,457	7,460	99,911	...	...	...	...
DECREASE			...	...	...	...	...	...	...	...	4,583	33,477	1,795	12,570

DIX 17—continued.

the earnings therefrom during the calendar year 1906.

in India and is therefore not the same as the total production]

XXIII.																		XXIV.		Main head.
RAILWAY PLANT AND ROLLING-STOCK CARRIED FOR THE PUBLIC AND FOREIGN RAILWAYS.																				
(8) Others.		Total.		(1) Locomotives, engines and tenders and parts thereof.		(2) Carriages and trucks and parts thereof.		(3) Materials.						Total.		Salt.				
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	(a) Steel rails and fish-plates.		(b) Sleepers and keys of steel and cast-iron.		(c) Others.		Quantity.	Earnings.	Quantity.	Earnings.			
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.			
5,387	74,421	10,855	2,07,626	377	3,638	839	2,255	3,549	14,324	46	368	85,957	4,40,330	93,768	4,60,963	107,146	6,78,693	1		
24,940	1,57,250	47,874	3,98,620	185	1,054	540	3,443	43,368	1,85,187	3,026	13,463	62,240	1,24,810	109,369	4,27,916	301,465	5,91,958	2		
8,329	52,218	10,476	60,478	200	1,220	...	...	191	553	95	90	19,175	35,076	19,081	36,938	66,528	4,41,107	3
79,081	8,27,890	103,562	12,06,065	2,253	21,122	1,664	16,801	1,412	8,294	318	3,468	102,199	5,51,912	107,816	6,00,677	244,430	12,00,738	4		
46,608	4,59,395	90,072	12,15,035	98	816	164	1,040	22,778	2,41,071	20,212	1,32,353	10,081	87,664	53,327	4,04,989	221,103	21,30,470	5		
108,434	7,65,081	122,476	8,67,439	6	117	5	244	1,190	9,532	101	240	951	4,617	2,253	1,055	104,643	5,15,035	6		
5,117	24,470	15,620	1,15,420	...	...	...	...	22	177	...	...	...	...	22	177	83,053	1,68,348	7
11,408	1,90,574	51,840	8,14,237	1	7	193	312	49	784	682	1,500	80,414	2,03,662	81,313	2,68,265	133,413	8,30,414	8		
683	7,310	4,881	35,647	...	...	...	...	...	...	...	...	3,071	8,523	3,071	8,523	57,292	2,75,948	9
4,478	36,765	5,132	42,771	...	...	...	...	393	9,023	...	...	226	865	619	4,488	22,491	86,595	10
13,326	59,570	18,413	1,11,204	6	64	104	103	...	...	...	...	183	245	312	413	110,785	4,80,848	11
885	4,204	910	4,283	...	...	...	...	27	12	...	...	208	478	235	490	4,332	19,482	12
5,739	28,450	9,426	49,923	147	305	...	...	1	5	...	...	8	15	150	325	8,331	8,610	13
40,046	3,58,742	42,376	3,81,577	...	...	...	...	818	2,213	...	...	6	3	854	2,256	20,725	2,11,345	14
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	15
...	...	978	6,507	...	...	...	...	...	...	...	...	...	...	...	...	919	4,091	16
3,981	17,687	7,100	54,000	...	...	...	...	...	...	...	...	...	2	...	2	10,364	98,268	17
1,900	10,154	10,080	75,147	548	1,436	3	8	509	1,276	101	240	3,524	10,510	4,688	13,470	24,159	1,16,685	18		
6,218	21,271	6,457	22,208	1	8	...	...	32	325	...	...	92	392	125	725	4,794	8,083	19
379	1,032	517	1,471	...	...	...	...	1,118	970	57	32	19	8	1,188	1,010	774	1,434	20
14,282	1,00,999	37,705	3,00,372	218	1,513	98	423	28,914	1,28,458	692	2,343	160,016	1,59,016	1,79,998	2,91,743	276,316	26,35,292	21		
656	5,459	1,251	8,054	3	35	26	1,565	35	52	3,404	9,316	322	1,163	3,890	10,651	30,983	99,319	22		
28,123	1,74,090	30,192	1,90,569	98	63	...	2	13	70	3	5	884	2,20	943	2,56	81,702	3,11,068	23		
19,695	1,35,364	53,541	3,77,575	3	10	791	4,830	6,711	51,694	717	2,503	7,280	14,537	15,532	1,03,064	57,817	4,66,261	24		
905	3,805	1,722	8,359	1	1	...	...	1	3	...	...	3	9	5	13	1,520	6,818	25
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	26
82	267	939	2,405	...	...	...	...	...	...	...	...	...	...	...	...	3,920	9,311	27
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	28
...	...	191	581	...	...	...	...	...	...	...	...	...	...	...	...	...	...	29
3,576	26,417	3,708	28,452	...	...	...	...	...	...	...	...	...	...	...	...	1,014	9,853	30
47	124	66	172	...	...	...	...	27	113	...	...	16	57	43	170	879	1,581	31
36	33	39	85	...	...	...	...	...	...	1	1	2	2	3	3	527	240	32
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	288	361	33
...	...	20	39	...	...	...	...	...	...	...	...	...	...	...	...	124	114	34
...	...	21	143	...	...	...	...	...	...	68	537	...	...	68	537	4	26	35
1,244	83,480	2,300	34,482	...	...	...	...	...	...	...	...	...	...	...	...	1,220	18,651	36
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	37
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	38
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	39
487,341	35,79,809	707,553	67,82,539	4,143	31,476	4,427	39,961	111,215	6,50,776	20,840	166,594	529,808	19,44,495	679,290	27,21,922	1,843,188	1,18,78,751	40		
438,111	35,48,609	701,661	67,91,436	4,877	36,825	3,638	17,008	97,468	5,45,374	29,251	1,66,398	590,722	21,89,215	725,946	29,14,721	1,738,046	1,07,23,782	41		
12,330	37,140	5,853	...	...	4,651	789	11,513	13,757	1,05,402	395	856	...	...	...	...	106,093	6,54,972	42
...	...	...	3,907	734	...	...	...	...	...	...	...	80,884	3,44,720	46,647	2,22,798	...	...	43

Principal commodities carried by railways and

(The total quantity of each commodity represents the total weight conveyed over all railways in India

NUMBER.		Railway system, vide Appendix B.	XXV.						XXVI.									
Main head.	Sub-head.		SALTPETRE AND OTHER SALINE SUBSTANCES.						SILK.									
			(1) Salt-petre.		(2) Other saline substances.		TOTAL.		(1) Raw.				(2) Piece goods.				Total.	
									(a) Foreign.		(b) Indian.		(a) Foreign.		(b) Indian.			
			Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
			Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
			5' 6" gauge.															
1	(a), (b) & (c)	Bengal-Nagpur . . .	...	...	...	...	...	...	...	600	8,430	...	...	...	...	600	8,430	
2	(a), (c) to (f) & (m) & (n).	Bombay, Baroda and Central India.	2,152	17,912	1,620	18,820	3,672	30,702	262	6,034	96	2,347	50	1,570	74	1,769	481	11,720
3	...	Eastern Bengal State .	112	305	3,272	10,130	3,384	10,504	...	...	384	3,612	...	...	...	...	384	3,612
4	...	East Indian . . .	22,092	1,49,814	23,501	1,69,310	15,653	4,18,834	...	...	600	7,467	...	...	104	4,629	703	12,490
5	...	Great Indian Peninsula	1,052	10,112	4,417	49,639	5,469	59,781	137	1,981	98	6,543	10	415	7	281	282	9,320
6	(a) to (d)	Madras . . .	598	6,430	1	15	600	6,045	31	277	164	3,475	340	3,218	32	363	567	7,353
7	(a) & (b)	Nizam's Guaranteed State.	151	904	1,129	8,628	1,380	9,622	...	...	...	...	...	5	...	6	...	11
9	...	North Western State .	6,256	29,931	6,157	80,491	12,713	90,332	209	3,375	214	5,553	21	503	20	997	473	10,468
10	...	Oudh and Rohilkhand State.	1,047	4,050	223	975	1,270	5,031	...	...	...	...	...	...	2	30	2	30
3' 3 1/2" gauge.																		
11	...	Assam-Bengal . . .	...	...	...	...	...	...	...	20	234	...	...	...	...	20	234	
12	...	Bengal and North-West ern.	12,644	48,472	7,315	1,125	10,009	78,597	...	...	7	50	...	...	3	44	10	94
13	...	Bengal-Dooars . . .	1	9	84	381	85	398	...	...	...	...	...	...	...	...	...	...
14	...	Bhavnagar-Gondal and Junagadh-Forbandar.	62	282	11	57	73	330	9	36	2	12	...	...	...	1	11	40
15	...	Burma . . .	9	116	81	1,390	90	1,538	32	613	11	384	4	80	1	7	48	1,590
16	...	Deoghur . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17	...	Dibru-Sadiya . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18	(a)	Hyderabad-Godavari Valley.	66	710	174	1,371	240	2,000	4	70	2	37	...	1	6	118	11	332
19	...	Jodhpur-Bikaner . . .	372	1,910	1,100	6,927	1,772	8,737	18	62	...	13	...	9	3	31	21	116
20	(a) to (h)	Madras . . .	60	444	...	...	59	444	...	...	20	60	...	...	...	...	20	60
21	...	Morvi . . .	3	14	...	...	3	14	...	...	...	...	...	...	...	...	...	...
22	(b) & (g) to (m).	Rajputana-Malwa . . .	7,088	61,006	2,000	15,710	9,905	76,716	186	9,141	17	900	50	2,230	40	1,706	293	13,986
23	(a) & (b)	Rohilkhand and Kumaon	151	351	1,006	2,851	1,157	3,201	...	...	...	...	...	...	...	...	...	...
24	...	South Indian . . .	435	2,383	8	103	443	2,486	1	28	10	176	13	159	21	159	45	622
25	...	Southern Mahratta . .	279	2,204	277	2,007	556	4,271	110	2,093	211	1,924	1	8	...	...	352	4,624
26	...	Udaipur-Chitor . . .	54	208	35	220	89	509	...	...	...	...	...	...	1	5	1	5
2' 6" gauge.																		
27	...	Barnet-Dashbur Light	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
28	...	Bareilly Light . . .	...	...	51	150	54	150	2	10	...	...	...	...	...	...	2	10
29	...	Bokharipore Behar Light.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
30	...	Cutch . . .	4	10	...	...	4	10	...	...	...	...	...	...	...	...	...	...
31	...	Kalka-Simla . . .	1	12	2	40	3	52	2	28	4	53	...	...	...	...	6	111
32	(a)	Mourbbanj . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
33	(d)	Parlakimedi Light . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
34	(e)	Powayan Light . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
35	...	Tarakeswar-Magra . . .	...	...	7	10	7	10	...	...	2	6	...	...	...	...	2	6
36	...	Tarpore-Ballpara Ligh	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2' 0" gauge.																		
37	...	Darjeeling-Himalayan	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
38	...	Howrah-Amta Light . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
39	...	Howrah-Sheekhala Light	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
40	...	Jorhat . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
TOTAL 1906			55,838	4,37,226	53,134	3,79,147	10,8,722	8,16,373	1,633	24,856	2,389	41,727	480	8,264	413	10,116	4,803	84,768
TOTAL 1905			49,274	3,77,816	50,823	3,79,093	100,097	7,57,469	1,174	28,978	2,732	48,029	190	8,687	362	11,620	4,468	95,215
INCREASE			6,564	59,410	2,311	...	8,625	58,874	...	...	...	...	290	...	50	...	...	...
DECREASE			...	...	...	638	...	...	141	4,323	363	4,301	...	433	...	1,404	155	10,460

DIX 17—continued.

the earnings therefrom during the calendar year 1906.

and is therefore not the same as the total production.]

XXVII.														XXVIII.		Main head.	
Spices.														Stone and lime.			
(1) Betel-nuts.		(2) Cardamoms.		(3) Chillies.		(4) Ginger.		(5) Pepper.		(6) Others.		Total.					
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.				
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.		
7,061	58,759	...	...	10,773	1,20,240	...	...	...	...	7,115	52,257	24,072	2,31,250	73,789	2,24,180	1
1,108	20,071	95	1,471	2,930	23,851	1,700	9,603	750	15,606	8,651	92,061	15,733	1,62,740	60,527	1,67,526	2	
17,486	1,45,037	202	6,122	5,796	39,437	1,133	10,833	234	4,206	3,814	19,232	29,765	2,37,367	40,972	50,477	3	
8,724	1,74,973	500	14,131	9,951	1,51,815	1,470	14,055	1,626	48,005	11,319	1,53,221	32,810	5,46,240	437,290	14,00,014	4	
10,291	2,31,274	73	1,842	9,331	91,602	375	7,407	301	12,853	11,004	1,46,751	31,495	4,92,519	1,30,314	4,79,881	5	
11,223	1,35,791	48	531	23,873	1,51,826	720	5,777	9,425	43,451	3,188	17,691	45,074	9,54,007	75,470	1,57,707	6	
857	8,846	11	165	2,701	21,816	35	353	41	427	1,491	12,287	5,106	43,804	19,758	59,023	7	
506	5,315	269	4,833	6,116	64,460	1,427	14,135	1,213	27,373	5,067	48,892	16,017	1,85,017	240,202	4,21,940	8	
1,669	22,858	31	306	1,672	15,207	308	3,443	68	868	1,521	9,989	5,379	40,761	8,768	1,13,611	10	
1,931	22,027	...	...	2,026	15,490	2	11	5	49	157	1,844	4,121	39,785	18,847	4,612	11
2,482	20,470	540	2,479	5,901	34,514	1,353	12,302	503	9,321	3,113	23,029	13,682	98,111	31,643	67,803	12	
498	2,232	38	368	12	30	74	103	34	163	59	219	714	8,145	371	2,313	13	
479	2,369	5	40	541	2,742	10	85	10	76	1,142	3,182	2,103	8,199	88,970	82,536	14	
5,975	57,955	6	223	5,890	97,209	995	10,114	53	781	168	2,537	13,075	1,60,519	145,822	2,03,095	15	
...	16
...	3,033	4,995	...	17
674	6,040	1	10	620	6,547	29	263	11	115	442	4,501	1,660	18,201	1,430	6,164	9	
111	853	6	48	669	7,074	24	189	35	266	391	1,701	1,126	10,134	28,273	53,300	18	
1,811	3,800	5	16	2,786	10,362	42	131	176	297	87	234	4,927	15,029	1,512	7,914	6	
8	30	...	1	69	287	4	11	1	3	62	269	143	604	8,323	6,058	19	
743	10,155	101	2,355	4,289	38,132	455	9,095	504	17,862	9,825	92,298	16,007	1,89,907	86,442	3,07,137	2	
250	2,094	27	190	632	3,076	175	579	29	234	841	2,236	1,614	9,600	9,539	16,527	20	
14,404	72,185	546	4,625	8,525	85,033	564	2,905	784	6,515	454	2,100	25,277	1,74,333	2,15,599	2,15,510	21	
10,970	88,480	158	2,751	15,612	10,006	200	2,649	408	3,582	9,901	61,761	37,379	2,59,139	52,241	1,01,409	22	
5	25	...	2	35	212	15	112	3	25	112	464	170	610	143	482	23	
...	24
518	1,425	...	1	10	34	8	24	9	24	182	467	777	1,075	205	407	25	
...	26
2	7	...	...	44	122	13	38	1	3	40	184	109	304	4	10	27
8	155	...	4	12	239	212	1,293	1	16	7	123	240	1,830	1,200	12,841	30	
22	45	...	...	3	3	...	...	...	...	7	15	31	63	735	559	1
2	2	...	...	17	15	...	...	...	...	20	21	45	34	4	4	1
...	20
4	7	...	...	...	...	...	...	...	...	...	...	4	7	15,302	5,307	32
...	...	...	...	...	...	...	...	...	...	...	...	...	...	62	184	33
40	1,181	147	2,373	12	242	...	12	17	431	19	362	243	4,001	1,859	11,634	35	
...	36
...	37
...	38
99,803	10,95,899	2,865	45,391	129,194	10,98,688	11,575	1,14,625	13,652	1,89,703	80,045	7,70,093	339,051	38,32,401	1,894,531	41,51,584		
101,506	11,32,847	2,401	46,949	119,637	11,47,915	11,982	1,37,947	13,396	1,72,040	79,693	7,98,544	3,27,514	34,33,242	1,075,102	38,62,039		
...	...	214	...	2,657	...	...	...	1,398	17,863	352	...	2,440	...	223,360	5,10,845	
1,702	35,948	...	1,655	...	40,027	877	23,322	...	...	...	18,592	...	1,10,841	...	...

Principal commodities carried by railways and

[The total quantity of each commodity represents the total weight conveyed]

Main head.	Sub-head.	Railway system, vide Appendix 3d	XXIX.								XXX.					
			Sugar.								Tea.					
			(1) Refined or crystallized including sugarcandy.		(2) Unrefined.				Total.		(1) Foreign.		(2) Indian.		Total.	
			Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
			Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
5' 0" gauge.																
1	(a), (b) & (c)	Bengal-Nagpur	15,070	1,09,196	..	..	12,507	97,200	27,687	2,06,396	..	..	373	6,424	873	6,424
2	(a), (c) to (f) & (n) & (o)	Bombay, Baroda and Central India	44,762	6,44,189	384	2,0-5	30,210	3,01,221	75,368	9,47,475	381	5,143	302	5,048	683	10,191
3	...	Eastern Bengal State	15,0-0	1,20,407	10,75-	87,755	39,4-3	1,72,689	71,276	9,40,861	...	..	33,314	6,70,129	33,314	6,70,129
4	...	East Indian	47,206	3,68,929	100,166	10,90,42	137,425	6,72,903	280,797	21,32,752	...	..	2,024	43,220	2,024	43,220
5	...	Great Indian Peninsula	78,200	12,70,948	12,011	91,267	96,102	8,09,600	184,173	21,73,713	139	2,180	1,031	24,498	1,170	26,678
6	(c) to (d)	Madras	9,312	65,824	7,303	26,218	61,713	2,51,740	78,178	9,34,181	1	18	849	18,816	847	18,833
7	(a) & (b)	Nizam's Guaranteed State	3,997	31,007	367	2,901	5,001	35,715	0-165	69,573	17	241	82	1,461	99	1,702
8	...	North Western State	179,633	27,80,194	32,163	2,63,457	140,102	10,22,154	311,487	40,06,505	869	20,717	2,125	31,417	2,994	64
10	...	Oudh and Rohilkhand State	21,493	1,51,117	52,100	2,51,772	149,674	7,15,181	203,333	11,17,078	...	..	2,352	19,004	2,352	19,004
3' 8 1/2" gauge.																
11	...	Assam-Bengal	5-8	3-807	1-009	7,910	2,212	10-196	4,111	21,712	...	..	20,778	1,54,818	20,778	3,54,818
12	...	Bengal and North-Western	7,424	61,571	40-1	2,54,718	99-33	5,01,717	146,114	4,11,506	...	..	68	780	68	700
13	...	Bengal-Dooars	705	3,010	231	894	9-7	4,615	1,093	8,549	..	..	16,421	3,31,088	16,421	3,31,088
14	...	Bhavnagar-Gondal-Junagadh-Port-Bandur	10,740	46,514	...	...	3,511	11,528	13,751	58,272	1	10	83	616	84	626
15	...	Burma	186	1,857	5,295	57,300	15,110	1,22,619	20,170	1,41,660	1,081	21,033	74	1,198	1,155	22,230
16	...	Deoghar . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17	...	Dibru-Sadiya	571	3,124	...	...	...	...	571	3,022	...	...	9,798	82,019	9,798	82,019
18	(c)	Hyderabad-Godavari Valley	2,901	20,2-9	141	1,73-	984	6,058	4,024	3275	3	54	3	45	6	90
19	...	Jodhpur-Bikaner	4,134	24,091	5,012	21,948	9,320	56,776	18,104	1,06,104	4	63	1	28	5	61
20	(c) to (k)	Madras	6-8	3,004	824	2,608	1,455	4,777	3,3-7	10,414	...	..	391	2,244	391	2,244
21	...	Morvi	260	79-	22	63	599	1,434	910	2,259	...	..	2	10	2	10
22	(b) & (c) to (m)	Rajputana-Malwa	25,653	2,74,38-	40,710	3,51,310	69,227	9,54,563	150,800	15,60,370	451	8,825	216	2,287	667	11,112
23	(a) & (b)	Rohilkhand and Kumaon	2,718	6,053	7,550	20,042	27,145	1,08,573	37,413	1,35,568	...	..	105	1,774	195	1,774
24	...	South Indian	16,773	74,341	6,599	23,472	36,185	2,11,804	59,727	3,09,609	1	9	3,904	26,348	3,905	26,357
25	...	South Western Maharashtra	10,229	68,034	7,195	48,803	53,618	3,31,272	70,942	4,51,109	38	654	52	804	90	1,558
26	...	Udaipur-Chittor	378	1,028	675	3,307	1,161	5,438	2,214	10,671	...	..	4	5	...	9
2' 6" gauge.																
27	...	Barnet Bierhat Light . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...
28	...	Baral Light	705	1,761	1	3	124	373	830	2,137	3	6	...	...	2	8
29	...	Bukhtiar-pore-Bihar Light . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...
30	...	Cutch	251	742	710	2,104	1,743	5,289	2,704	8,135	...	..	1	4	1	4
31	...	Kalpa Simla	294	3,096	417	4,544	971	9,004	1,672	17,214	18	301	20	384	35	695
32	(c)	Mourbhanj	32	66	...	...	7	19	39	85	...	..	...	1	...	1
33	(d)	Parlekmedhi Light	141	88	...	...	13	6	186	94	...	..	...	...	...	...
34	(c)	Powayan Light . . . . .	...	...	767	802	...	...	767	692	...	..	...	...	...	...
35	...	Tarakeshwar-Mogra Light . . . . .	...	...	126	131	153	132	278	263	...	..	...	...	...	...
36	...	Torpore-Balpara Light . . . . .	...	...	3	21	...	...	3	21	...	..	4,356	30,700	4,356	30,700
2' 0" gauge.																
37	...	Darjeeling-Himalayan	69	1,162	843	14,461	74	1,240	975	16,863	...	..	4,417	6,1,974	4,417	61,974
38	...	Howrah-Ainta Light . . . . .	...	...	...	...	...	...	...	...	...	..	...	...	...	...
39	...	Howrah-Shankhala Light . . . . .	...	...	...	...	...	...	...	...	...	..	...	...	...	...
40	...	Jorhat . . . . .	...	...	...	...	...	...	...	...	...	..	...	...	...	...
TOTAL 1906			463,758	60,30,673	341,103	26,37,317	993,185	64,37,248	1,798,012	1,51,06,136	2,983	59,376	112,816	17,19,213	115,809	17,78,529
TOTAL 1905			327,531	38,82,023	305,753	18,23,607	889,011	57,85,463	1,532,307	1,14,91,063	3,079	58,779	99,328	14,43,598	102,407	15,02,641
INCREASE			136,227	21,48,650	35,350	8,13,710	104,174	6,51,785	265,705	36,15,073	...	697	13,088	2,75,384	12,802	2,75,881
DECREASE			...	...	...	...	...	...	...	...	96	...	...	...	...	...

over all railways in India and is therefore not the same as the total production.]

16

Principal commodities carried by railways and

[The total quantity of each commodity represents the total weight conveyed]

NUMBERS.		Railway system, vide Appendix 38.	XXXIII.				XXXIV.		GRAND TOTAL.	
Main head.	Sub-head.		Wool—concluded.				All other articles of merchandise.			
			(2) Manufactured—concluded.		TOTAL.					
			(d) Other sorts of manufactures.							
			Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
		Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
5' 6" gauge.										
1	(a), (b) & (c)	Bengal-Nagpur . . . . .	...	...	...	...	137,243	8,95,181	3,999,315	1,03,66,293
2	(a), (c) to (f) & (n) & (o).	Bombay, Baroda and Central India	78	1,535	7,176	1,60,437	404,949	12,78,606	2,067,021	1,27,44,413
3	...	Eastern Bengal State . . . . .	...	...	1,728	33,014	111,205	6,00,714	2,065,098	1,32,59,077
4	...	East Indian	1,199	24,274	4,202	83,267	242,676	20,09,950	10,555,010	5,31,47,186
5	...	Groat Indian Peninsula	1,170	20,436	2,416	52,822	311,902	30,03,253	4,003,574	4,10,99,059
6	(a) to (d)	Madras	548	5,070	4,295	40,900	142,491	10,97,273	2,314,455	1,18,94,051
7	(a) & (b)	Nizam's Guaranteed State . . . . .	...	...	621	7,591	16,630	1,42,040	770,130	33,90,563
8	...	North-Western State	1,169	21,913	27,317	6,68,380	381,710	38,61,071	4,505,189	4,15,47,231
9	...	Outh and Rohilkhand State	68	522	706	5,451	275,235	14,35,015	1,487,264	67,84,271
3' 3½" gauge.										
11	...	Assam-Bengal	26	461	33	595	17,088	97,681	476,494	10,87,259
12	...	Bengal and North-Western	1	4	460	4,733	97,054	3,57,494	1,680,900	72,27,155
13	...	Bengal-Doon . . . . .	...	...	...	...	5,595	45,853	63,261	6,61,071
14	...	Bhavnagar-Gondal-Junagad-Forbandar	2	4	511	5,524	9,155	40,109	200,522	8,82,184
15	...	Burma	5	119	139	2,187	191,445	7,25,096	1,415,286	72,85,953
16	...	Deoghur . . . . .	...	...	...	...	14,724	5,142	14,724	5,142
17	...	Dibru-Sadiya . . . . .	...	...	...	...	43,126	64,807	657,140	8,28,498
18	(c)	Hyderabad-Godavari Valley . . . . .	...	5	124	1,708	3,983	45,194	235,827	18,38,440
19	...	Jodhpur-Bikaner	328	4,038	4,231	43,808	18,000	90,355	1,16,404	24,12,001
20	(c) to (h)	Madras	73	552	97	817	7,104	45,199	106,816	3,15,305
21	...	Morvi	1	7	308	1,591	1,234	3,701	25,634	51,629
22	(b) & (c) to (m)	Rajputana-Malwa	153	3,003	9,308	1,52,863	218,714	12,53,378	2,318,022	1,78,54,155
23	(a) & (b)	Rohilkhand and Kumaon	74	406	426	2,610	68,903	1,69,357	388,257	11,31,216
24	...	South Indian	61	808	539	6,125	130,083	7,02,073	1,502,039	60,02,525
25	...	Southern Mahratta	773	7,588	1,395	15,292	53,900	3,03,641	1,181,945	70,16,311
26	...	Udaipur-Chitor . . . . .	...	1	101	656	624	5,654	21,640	68,377
2' 0" gauge.										
27	...	Barnaset-Basirhat Light . . . . .	...	...	...	...	4,154	6,075	4,154	6,075
28	...	Barso Light	6	22	7	27	750	2,350	54,677	1,33,798
29	...	Bukhtinipore-Bihar Light . . . . .	...	...	...	...	28,118	41,345	28,118	41,345
30	...	Cutch . . . . .	...	...	...	...	2,396	6,609	10,076	33,200
31	...	Kalka-Simla	3	70	94	2,034	3,761	48,262	80,471	3,20,428
32	(c)	Mourbhauj . . . . .	...	...	...	...	3,130	8,262	12,084	18,939
33	(d)	Parlakimedi Light . . . . .	...	...	...	...	267	262	6,135	4,800
34	(e)	Powayan Light . . . . .	...	...	...	...	22,643	34,638	31,030	46,016
35	...	Tarakeshwar-Magra Light . . . . .	...	...	3	4	790	890	25,578	17,806
36	...	Tezpor-Bahipara Light . . . . .	...	...	...	...	6,370	18,010	16,514	63,708
2' 0" gauge.										
37	...	Darjeeling-Himalayan	6	116	29	709	4,218	48,249	39,233	5,04,064
38	...	Howrah-Amta Light . . . . .	...	...	...	...	19,505	31,743	10,505	31,743
39	...	Howrah-Sheakhala Light . . . . .	...	...	...	...	7,367	9,024	7,362	9,024
40	...	Jorhat . . . . .	...	...	...	...	14,616	59,248	14,616	59,248
TOTAL 1900			5,744	90,893	68,659	12,61,150	3,034,078	1,93,67,396	44,018,007	35,78,08,333
TOTAL 1905			5,023	87,780	65,446	13,17,328	3,144,987	1,81,30,498	40,738,491	34,43,06,779
INCREASE			721	3,113	1,213	45,831	...	12,36,898	3,316,116	1,36,91,574
DECREASE . . . . .			...	...	...	...	109,079	...	...	...

DIX 17—concluded.

the earnings therefrom during the calendar year 1906.

over all railways in India and is therefore not the same as the total production.]

ANIMALS.										NUMBER.	REMARKS.
(1) Horses.		(2) Cattle.		(3) Sheep, etc.		(4) Elephants.		TOTAL.		Main head.	
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.		
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.		
175	8,800	8,301	30,800	3,643	37,626	25	1,778	12,144	85,079	1	
220	8,004	10,809	2,16,470	17,789	3,45,353	...	...	24,008	5,69,757	2
26	618	2,013	23,445	108	1,357	...	...	2,507	24,317	3
1,320	1,40,880	3,337	76,292	6,253	1,25,088	...	3,641	9,910	3,45,820	4	
1,100	83,669	17,612	1,52,761	6,854	1,04,039	...	...	25,369	3,00,136	5
...	...	...	...	...	...	...	...	...	...	6
207	5,762	43	863	54	780	...	...	304	7,405	8
2,012	52,700	4,205	60,179	427	16,207	...	...	6,734	1,25,135	9
422	23,681	899	8,511	16	470	...	...	777	32,502	10
3	86	51	703	222	2,734	...	...	275	3,813	11
135	4,729	4,600	62,539	69	865	...	...	4,504	68,133	12
...	...	...	...	...	...	...	...	...	...	13
10	194	81	775	10	112	...	...	107	1,081	14
785	25,457	3,742	1,10,575	2,457	63,950	...	...	6,084	1,90,882	15
...	...	...	...	...	...	...	...	...	...	16
...	...	85	535	...	...	...	...	85	535	17
62	1,016	22	718	16	303	...	...	100	2,637	18
36	726	22	350	7	60	...	...	65	1,136	19
...	...	...	...	...	...	...	...	...	...	20
10	130	4	76	...	...	...	...	11	212	21
381	9,548	3,063	40,501	7,236	84,303	...	...	10,087	1,40,718	22
7	127	10	296	1	19	...	...	21	442	23
36	943	1,595	8,845	3,786	31,898	...	...	5,417	41,078	24
230	6,505	343	7,651	1,065	8,524	27	894	1,665	23,564	25	
4	47	2	10	...	...	...	...	6	67	26
...	...	...	...	...	...	...	...	...	...	27
...	...	...	...	...	...	...	...	...	...	28
...	...	...	...	...	...	...	...	...	...	29
...	...	...	...	...	...	...	...	...	...	30
...	...	...	...	...	...	...	...	...	...	31
...	...	...	...	...	...	...	...	...	...	32
...	...	...	...	...	...	...	...	...	...	33
...	...	...	...	...	...	...	...	...	...	34
...	...	...	...	...	...	...	...	...	...	35
...	...	...	...	...	...	...	...	...	...	36
...	...	...	...	...	...	...	...	...	...	37
...	...	...	...	...	...	...	...	...	...	38
7,169	3,43,197	60,970	8,11,215	40,072	8,23,640	52	6,308	1,17,293	10,94,358		
10,044	3,90,407	44,193	6,38,571	44,509	7,46,373	32	3,430	98,777	17,46,731		
...	...	10,777	1,72,044	4,564	75,817	20	2,676	19,506	1,07,627		
3,885	83,310	...	...	...	...	...	...	...	...

* Excluding Rs. 5,62,484 in respect of ferries and steam-boats which are included in the details.

Analysis of working of each railway

NOTE.—Railways not shown

Serial number.	PARTICULARS.	GAUGE.											
		Number.	5' 6"										
			1 (a)	2 (a) to (f)	3 (a)	4 (a) to (d)	5 (a) to (f)	6 (a) to (d)	8 (a) & (b)	9 (a) to (g)	10 (a) & (b)	11 (a)	
		Calendar year 1906.	Bengal-Nagpur	Bombay, Baroda and Central India	Eastern Bengal.	East Indian.	Great Indian Peninsula. G.I.P. I.M.	Madras.	Nizam's Guaranteed State.	North West-erna.	Oudh and Rohilkhand.	Assam-Bengal.	
	DESCRIPTION OF RAILWAY WORKED.												
1	Gauge of railway . . . . .	...	5' 6"	5' 6"	5' 6"	5' 6"	5' 6"	5' 6"	5' 6"	5' 6"	5' 6"	3' 3 3/4"	
2	Mileage worked Miles	...	1,698.32	884.03	497.95	2,321.95	1,091.37	1,178.72	1,425.23	354.70	4,111.18	1,220.92	772.88
3	Number of stations No.	...	240	138	129	414	264	118	318	45	623	191	126
4	Total length of the following gradients :—												
	(a) 1/100 and less Miles	...	...	...	...	5.90	19.31	} 6.75	...	...	88.62	0.19	10.10
	(b) 1/100 to 1/50 "	...	0.15	1.32	...	17.66	2.82		22.84	...	93.23	9.30	33.03
	(c) 1/50 to 1/25 "	...	103.90	0.50	...	48.86	61.90	11.23	58.97	79.19	197.10	6.41	25.70
	(d) 1/25 to 1/10 "	...	570.81	169.58	...	209.49	550.16	365.30	294.72	110.99	187.96	19.15	97.44
	(e) 1/10 to 1/5 "	...	141.78	63.31	5.97	162.31	210.95	105.14	156.28	18.22	114.09	22.56	31.65
5	Steepest gradient worked—												
	(a) Length Miles	...	0.15	1.32	2.00	14.26	5.99	2.10	0.80	2.52	5.60	0.19	8.54
	(b) Inclination . . . . .	...	1/5	1/5	1/50	1/50	1/5	1/50	1/50	1/5	1/5	1/5	1/5
	FINANCIAL RESULTS.	Calendar year 1906 by half-years.											
6	Percentage of net earnings (including steam-bout traffic) for each half-year on capital outlay Per cent.	{ 1st half 2nd "	3.16 2.16	4.45 3.01	1.42 3.77	4.91 4.41	1.61 2.96	2.52 1.80	2.54 1.45	3.47 2.96	2.56 2.71	2.80 2.20	0.09 0.25
7	Percentage of net earnings for each half-year on paid up capital Per cent.	{ 1st half 2nd "	3.11 2.17	...	...	...	...	2.57 1.86	2.54 1.46	2.97 2.55	...	...	...
	OUTLAY, EARNINGS AND EXPENSES.												
	(Exclusive of Steam-bout Service)												
8	Capital outlay per mile open Rs.	{ 1st half 2nd "	1,46,200 1,49,160	1,89,859 1,90,755	2,05,033 2,08,520	2,30,318 2,17,710	2,00,008 2,09,318	1,40,153 1,40,376	1,38,727 1,39,811	1,30,369 1,30,487	1,41,733 1,41,006	1,18,634 1,19,458	1,56,716 1,59,205
9	Total earnings per mile open per week "	{ 1st half 2nd "	318 271	591 458	428 662	704 658	481 379	502 275	280 244	321 317	273 231	91 118	
10	Total working expenses per mile open per week "	{ 1st half 2nd "	131 139	260 234	307 335	266 262	222 207	154 188	105 95	172 161	137 127	86 102	
11	Total earnings per train-mile "	{ 1st half 2nd "	4.61 3.92	6.67 5.54	3.63 4.77	4.84 4.65	4.39 3.75	4.13 4.03	4.54 4.47	3.75 3.69	3.39 3.09	2.42 2.82	
12	Total working expenses per train-mile "	{ 1st half 2nd "	1.90 2.01	2.94 2.81	2.61 2.42	1.83 1.85	2.03 2.05	2.26 2.76	1.70 1.74	2.00 1.87	1.70 1.70	2.27 2.44	
13	Net earnings per train-mile "	{ 1st half 2nd "	2.71 1.91	3.73 2.71	1.02 2.35	3.02 2.80	2.36 1.70	2.17 1.27	2.84 2.73	1.75 1.82	1.69 1.39	0.15 0.38	
14	Cost per 1,000 gross ton miles moved (freight and dead weight) "	{ 1st half 2nd "	4.52 5.08	6.83 7.20	7.71 7.04	3.64 3.68	5.51 5.91	6.43 8.32	4.33 4.37	5.60 5.19	4.84 4.94	11.01 10.42	
15	Percentage of total working expenses on total earnings Per cent.	{ 1st half 2nd "	41.25 51.31	44.01 51.05	71.78 50.58	37.73 39.85	46.76 54.39	50.99 68.40	37.49 38.25	53.51 50.67	50.20 55.10	93.71 86.70	
16	Percentage of total working expenses on total earnings, excluding from both sides of the account the charges for carriage of revenue stores Per cent.	{ 1st half 2nd "	39.72 49.73	43.16 50.65	72.22 50.14	36.37 38.50	44.66 53.38	40.41 67.29	37.22 38.76	51.26 49.03	48.17 53.20	93.52 86.28	
	(Inclusive of Steam-bout Service).												
17	Percentage of total working expenses on total earnings (for details, see items 123—129) Per cent.	{ 1st half 2nd "	42.13 52.45	44.01 51.05	71.78 50.58	37.82 40.04	46.26 54.69	50.99 68.40	37.49 38.85	53.53 50.68	50.20 55.10	93.95 86.66	

DIX 18.

system during each half-year of 1906.

do not prepare these statistics.

3' 3 3/4"												2' 6"				GAUGE.		Serial number.
12 (a) & (b)	14 (a) to (d)	15 (a)	3 (b) & (c)	8 (c)	13 (a) to (c)	2 (g) to (m)	20 (a) & (b)	21 (a) to (f)	23 (a) to (j)	23 (a)	1 (b)	30 (a)	9 (h) & (i)	1 (e)	Number.			
Bengal and North-Western.	Bhavnagar-Gondal-Junnagar-Porbandar	Burma.	Eastern Bengal.	Hyderabad (Godavari Valley).	Jodhpur-Bikaner.	Rajputana-Malwa.	Rohilkund and Kumaon.	South Indian.	South-eastern Mah-ratta.	Udaipur-Chitor.	Jubbulpore-Gondia extension.	Kalka-Simla.	Kamshalgah-Kohat-Thal and Nowshera-Durgai.	Raipur-Dham-tari.	Calendar year 1906			
3' 3 3/4"	3' 3 3/4"	3' 3 3/4"	3' 3 3/4"	3' 3 3/4"	3' 3 3/4"	3' 3 3/4"	3' 3 3/4"	3' 3 3/4"	3' 3 3/4"	3' 3 3/4"	2' 6"	2' 6"	2' 6"	2' 6"	...	1		
1,621.76	455.45	1,340.15	881.82	391.13	833.22	2,079.89	340.36	1,355.79	1,723.42	68.72	241.77	59.44	131.98	56.69	...	2		
287	64	236	145	47	85	295	61	243	244	7	28	21	21	9	...	3		
...	1.83	64.52	0.37	3.10	...	0.04	15.06	6.00	0.96	0.27	...	}	4	
...	0.28	81.83	0.64	...	...	0.23	6.41	14.61	75.82	...	31.51	2.38	...	...	...
0.69	1.09	47.78	2.05	...	...	18.75	8.56	120.82	550.10	1.10	60.54	9.94	43.55	...	...	
5.14	123.76	155.52	21.23	221.73	168.36	360.44	4.40	243.71	265.92	30.75	38.07	3.40	36.24	18.00	...	}	5	
4.61	64.74	107.78	15.13	13.95	61.24	173.72	6.83	108.56	98.45	6.98	18.39	...	22.74	1.95	...			
0.69	1.83	9.81	0.82	5.41	2.31	3.40	8.00	0.04	15.06	0.40	0.07	27.61	9.43	0.27	...			
1.06	1.06	1.06	1.06	1.06	}	6	
3.61	3.40	2.84	2.88	3.51	6.07	5.32	3.99	2.95	2.21	4.34	1.25	0.93	—0.77	2.81	1st half			
2.74	2.16	1.41	4.14	1.80	3.61	3.82	2.05	2.87	1.29	2.19	0.68	0.81	—0.20	1.25	2nd "			
...	3.49	1.20	1.00	...	2.81	1st half	}	7	
...	...	...	...	1.81	...	...	...	...	...	...	0.66	...	...	1.25	2nd "
77,498	49,860	98,706	92,880	67,182	25,616	74,295	52,707	78,879	79,156	30,759	50,941	291,623	65,311	24,830	1st half	}	8	
79,098	49,963	99,878	88,901	67,810	25,662	75,092	55,395	79,374	79,063	30,841	52,361	267,210	65,249	24,926	2nd "			
182	112	240	218	178	104	280	143	210	150	82	66	232	53	47	1st half	}	9	
163	86	201	250	120	84	234	124	200	124	60	55	203	61	32	2nd "			
69	47	186	133	86	38	123	60	119	81	30	40	119	71	20	1st half	}	10	
75	44	143	113	72	48	120	76	110	84	34	42	177	67	20	2nd "			
3.06	3.08	3.39	3.57	3.49	3.40	3.67	3.36	3.26	2.63	5.10	2.70	5.20	0.95	2.27	1st half	}	11	
2.77	3.63	2.72	3.93	2.94	2.56	3.20	8.00	2.94	2.42	3.93	2.09	5.42	0.95	1.54	2nd "			
1.16	1.67	1.85	2.18	1.68	1.25	1.62	1.41	1.84	1.43	1.88	1.70	2.71	1.27	0.96	1st half	}	12	
1.28	1.90	1.95	1.78	1.77	1.68	1.64	1.85	1.61	1.64	2.23	1.57	3.65	1.04	0.96	2nd "			
1.90	2.31	1.54	1.39	1.81	2.15	2.05	1.94	1.42	1.20	3.21	1.06	2.59	—0.32	1.31	1st half	}	13	
1.49	1.78	0.78	2.15	1.17	1.28	1.56	1.16	1.33	0.78	1.70	0.52	1.77	—0.09	0.58	2nd "			
4.83	8.78	8.36	11.17	8.08	5.04	6.50	6.74	9.29	7.29	8.13	8.40	31.00	21.87	9.75	1st half	}	14	
5.48	10.19	8.80	8.54	8.94	8.07	7.05	7.18	8.18	8.79	11.41	7.67	41.55	17.83	13.07	2nd "			
37.88	42.02	54.68	61.14	48.25	36.65	44.01	42.12	56.87	54.28	36.84	61.53	51.22	134.19	43.34	1st half	}	15	
46.26	51.62	71.36	45.28	60.84	57.09	51.26	61.51	54.72	67.68	56.73	75.19	67.42	109.38	62.16	2nd "			
36.79	41.15	58.50	58.25	46.67	35.47	43.07	41.51	55.79	52.77	36.92	54.64	51.13	135.04	38.52	1st half	}	16	
45.42	51.26	69.78	44.06	59.44	55.87	50.06	61.07	54.04	68.34	56.70	68.67	67.25	109.55	54.24	2nd "			
39.79	42.03	55.29	62.74	48.25	36.65	44.01	39.80	56.87	54.28	36.84	61.53	51.22	137.25	43.34	1st half	}	17	
46.81	51.62	71.36	46.99	60.84	57.09	51.26	67.72	54.72	67.63	56.73	75.19	67.42	112.25	62.16	2nd "			

Analysis of working of each railway

NOTE.—Railways not shown

Serial number.	PARTICULARS.	GAUGE.	5' 6"										
			Number	1 (a)	2 (a) to (f)	3 (a)	4 (a) to (d)	5 (a) to (f)	6 (a) to (d)	8 (a) & (b)	9 (a) to (g)	10 (a) & (b)	11 (a)
			Calendar year 1906 by half-years.	Bengal-Nagpur.	Bombay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula.	Madras.	Nizam's Guaranteed State.	North Western.	Oudh and Rohilkund.	Assam-Bengal.
DIVISION OF EXPENDITURE BETWEEN COACHING AND GOODS TRAFFIC.													
18	Total working expenses for both coaching and goods traffic excluding steam-bond expenses, and after deducting telegraph and sundry receipts (in thousands of Rs.)	Rs.	1st half 2nd "	54.54 56.78	54.76 49.31	37.46 41.04	1,51.22 1,51.57	1,51.97 1,50.48	54.14 67.97	9.06 8.01	1,75.98 1,69.96	30.07 37.28	16.31 19.06
	Proportions, dividing expenditure in ratio of gross ton-mileage (freight and dead load)—												
19	Coaching in thousands of Rs.	"	1st half 2nd "	13.75 16.83	10.74 21.48	17.81 17.24	42.03 43.71	51.14 57.96	17.41 23.71	1.95 2.18	52.05 54.20	17.70 18.22	6.01 6.24
20	Goods in thousands of Rs.	"	1st half 2nd "	40.79 39.91	35.02 27.83	19.65 23.80	1,12.19 1,10.86	1,10.81 92.52	36.73 44.23	7.11 5.83	1,23.87 1,15.67	21.28 19.05	10.33 12.82
COACHING TRAFFIC.													
Gross receipts and train-mileage (in thousands) —													
21	Receipts from coaching traffic	Rs.	1st half 2nd "	42.35 38.27	39.59 37.37	25.65 25.76	1,30.63 1,20.38	97.97 92.38	41.47 36.40	6.03 5.29	1,03.19 1,08.91	42.44 36.15	8.72 8.24
22	Coaching train-miles run	No.	1st half 2nd "	1,171 1,264	1,129 1,167	920 979	3,782 3,745	3,658 3,847	1,058 1,213	159 173	4,080 4,420	1,590 1,594	295 324
23	Average coaching receipts per train-mile	Rs.	1st half 2nd "	3.61 3.03	3.51 3.20	2.79 2.63	3.45 3.21	2.69 2.40	3.92 3.17	3.80 3.06	2.53 2.47	2.67 2.27	2.96 2.54
UNITS AND UNIT-MILEAGE.													
Number of units carried one mile (in thousands) —													
24	1st class	Unit-miles	1st half 2nd "	1,555 1,509	2,160 1,754	1,030 1,244	5,165 4,902	8,060 9,261	2,860 2,351	354 471	4,931 4,673	2,035 1,719	292 309
25	2nd "	"	1st half 2nd "	3,575 4,710	13,620 11,774	2,674 3,482	11,821 14,532	31,627 32,034	8,840 11,080	2,271 3,125	12,400 15,603	5,628 8,742	485 531
26	3rd or intermediate class	"	1st half 2nd "	8,005 10,389	15,924 15,652	14,314 18,143	53,243 59,806	61,812 61,342	2,923 2,572	4,561 5,145	48,368 53,640	23,808 24,505	341 400
27	4th or lowest	"	1st half 2nd "	280,597 247,564	239,073 220,632	149,782 184,571	844,981 764,729	533,387 481,584	262,830 247,574	34,271 30,579	675,920 683,753	247,871 207,278	49,363 45,038
28	Total passenger unit-mileage	"	1st half 2nd "	293,792 264,172	270,781 249,812	167,800 157,440	915,100 843,969	634,916 584,281	277,452 263,577	41,457 38,120	741,687 787,069	279,392 237,242	50,491 46,278
29	Other coaching traffic	Ton-miles	1st half 2nd "	1,760 1,738	3,116 3,196	1,105 1,407	9,336 9,061	9,313 8,262	3,170 2,819	476 374	5,281 7,488	1,874 1,631	380 407
Average sum received for carrying a unit one mile—													
30	1st class	Pies	1st half 2nd "	15.08 18.27	10.11 10.22	13.71 12.56	14.66 14.90	10.95 10.76	12.16 12.44	14.90 15.23	11.48 11.68	11.71 12.00	14.47 16.22
31	2nd "	"	1st half 2nd "	6.65 5.98	4.55 4.96	6.83 5.64	6.76 6.22	4.27 4.55	4.97 4.00	4.69 4.89	5.21 4.79	5.34 5.37	7.98 7.81
32	3rd or intermediate class	"	1st half 2nd "	3.37 3.18	3.00 3.00	2.97 2.61	3.25 3.00	2.97 2.97	4.50 4.60	2.80 2.50	3.02 3.02	3.03 3.08	4.01 3.98
33	4th or lowest	"	1st half 2nd "	2.38 2.36	2.24 2.28	2.41 2.50	2.24 2.21	2.16 2.16	2.24 2.23	1.99 1.99	2.26 2.26	2.47 2.44	2.88 2.89
34	Average for all classes	"	1st half 2nd "	2.52 2.52	2.46 2.51	2.63 2.70	2.43 2.40	2.45 2.51	2.46 2.41	2.80 2.81	2.42 2.43	2.64 2.64	3.01 3.04
35	Other coaching traffic per ton-mile	"	1st half 2nd "	40.08 40.16	29.87 28.85	46.40 49.21	30.49 31.30	34.65 37.10	36.10 35.85	43.53 35.46	35.44 34.12	40.68 40.94	42.88 42.57

DIX 18—continued.

system during each half-year of 1906—contd.

do not prepare these statistics.

3' 3"											2' 6"				Gauge.	Ser. num
12 (a) & (b)	14 (a) to (d)	15 (a)	8 (b) & (c)	8 (c)	19 (a) to (c)	2 (g) to (m)	20 (a) & (b)	21 (a) to (f)	22 (a) to (j)	23 (a)	1 (b)	30 (a)	9 (h) & (i)	1 (e)	Number.	
Bengal and North- West- ern.	Bhav- nagar- Gondal- Junagad- Porbandar.	Burma.	Eastern Bengal.	Hyder- abad- Godavari Valley.	Jodhpur- Bikaner.	Raj- putana- Malwa.	Rohil- khand and Kumaon.	South Indian.	South- ern Maharatta.	Udaipur- Chitor.	Jubbulpore- Gondia extension.	Kalka- Simla.	Kharhal- garh- Kohat- Thal and Nowshera- Dargai.	Raipur- Dham- tari.	Calendar year 1906 by half- years.	
27.05 30.74	5.84 4.90	46.18 48.34	26.94 23.99	8.31 6.97	8.05 10.13	64.61 62.74	5.32 6.89	40.94 37.45	35.58 36.69	51 58	2.46 2.01	1.82 2.69	2.42 2.26	29 29	1st half 2nd "	
11.43 14.17	2.62 2.90	16.86 18.58	10.83 8.92	2.82 3.08	2.83 4.34	20.71 24.28	2.26 4.10	18.82 17.21	11.53 13.62	83 41	91 93	89 1.13	98 1.01	8 9	1st half 2nd "	19
15.62 16.58	2.72 1.91	19.32 20.81	16.12 15.07	5.40 3.88	5.22 5.78	43.90 38.51	3.06 2.79	21.52 20.25	24.05 27.07	18 17	1.55 1.68	93 1.56	1.44 1.25	21 20	1st half 2nd "	
32.67 31.42	5.28 6.56	39.34 32.02	18.80 22.45	5.43 4.90	7.09 7.07	40.03 48.11	5.52 5.55	41.01 38.40	23.83 21.73	81 65	1.92 1.59	2.06 2.21	1.08 1.21	30 26	1st half 2nd "	21
1.383 1.362	180 183	1,001 1,028	638 697	187 187	267 302	1,800 1,999	173 268	1,165 1,229	995 995	17 87	50 59	85 30	76 91	11 12	1st half 2nd "	
2.59 2.31	2.79 3.59	3.03 3.12	2.94 3.32	2.69 2.63	2.66 2.51	2.73 2.41	3.19 2.67	3.52 3.13	2.89 2.18	4.73 2.44	3.63 2.67	5.06 7.21	1.42 1.34	2.76 2.10	1st half 2nd "	23
456 420	189 189	1,447 1,815	579 645	164 177	309 215	1,842 1,031	156 160	1,241 1,042	954 995	29 20	37 39	103 123	55 61	5 3	1st half 2nd "	
1,208 1,224	1,234 1,237	3,615 3,362	1,626 1,167	1,860 1,868	752 631	3,886 4,266	970 1,027	6,239 4,368	3,772 3,599	67 53	81 80	190 218	83 98	6 6	1st half 2nd "	25
4,986 5,598	1,417 1,418	...	7,726 6,985	...	1,997 9,261	10,246 10,255	405 471	...	...	7 66	62 51	...	78 49	31 22	1st half 2nd "	
233,125 268,137	41,267 37,266	227,304 170,894	114,808 184,688	41,924 37,266	52,768 55,074	384,376 391,682	38,418 37,144	346,761 321,818	172,764 158,661	6,454 5,165	15,750 13,556	1,676 1,671	7,030 9,104	1,702 1,494	1st half 2nd "	27
280,775 275,479	44,107 40,070	228,486 184,671	124,737 142,589	43,948 39,266	55,821 58,331	309,850 397,224	39,955 36,802	354,244 327,228	177,490 163,258	6,557 5,304	15,930 13,726	1,969 2,012	8,146 9,312	1,714 1,525	1st half 2nd "	
753 964	241 122	995 968	750 1,044	245 187	320 402	3,000 3,002	188 177	860 853	1,347 1,113	42 56	42 40	49 52	28 27	7 6	1st half 2nd "	29
12.98 12.99	11.34 11.29	16.12 15.29	13.84 13.82	11.45 11.79	11.57 15.14	14.10 13.88	25.58 27.87	11.78 11.69	15.45 15.39	17.35 17.93	15.85 15.52	49.32 49.32	11.80 11.58	15.40 14.65	1st half 2nd "	
6.12 6.09	5.65 5.64	8.04 7.73	6.68 7.57	4.55 5.05	6.25 6.50	6.47 6.58	7.80 8.66	4.33 5.06	5.66 5.94	8.97 8.98	8.00 7.81	27.48 27.48	5.81 5.68	7.93 7.40	1st half 2nd "	31
3.19 3.15	4.00 4.00	...	3.00 3.60	...	2.78 2.66	2.99 2.99	4.29 4.45	...	...	2.99 3.00	4.50 5.38	...	3.00 3.00	4.50 4.50	1st half 2nd "	
1.99 1.99	2.75 2.75	2.99 2.97	2.50 2.49	2.90 2.00	2.06 2.06	2.01 2.01	2.15 2.15	2.03 2.04	2.09 2.09	1.99 1.99	2.00 2.00	9.00 9.00	2.25 2.25	3.00 3.00	1st half 2nd "	33
2.98 2.05	2.81 2.98	3.16 3.14	2.64 2.66	2.14 2.19	2.19 2.20	2.12 2.12	2.40 2.45	2.19 2.13	2.24 2.25	2.14 2.13	2.07 2.08	12.90 13.47	2.36 2.35	3.08 3.06	1st half 2nd "	
44.63 39.18	47.89 47.91	34.81 36.46	48.56 49.24	40.53 42.85	42.28 42.02	30.84 27.99	59.44 64.17	50.61 50.08	44.66 43.50	35.03 33.41	47.15 47.81	204.05 206.09	58.18 52.90	45.87 45.40	1st half 2nd "	35

Analysis of working of each railway

NOTE.—Railways not shown

Serial number.	PARTICULARS.	GAUGE.										
		Num- ber.	5' 6"									
			1 (a)	2 (a) to (f) •	3 (a)	4 (a) to (d)	5 (a) to (f)	6 (a) to (d)	8 (a) & (b)	9 (a) to (g)	10 (a) & (b)	11 (a)
		Calon- dar year 1906 by half- years.	Bengal- Nagpur.	Bom- bay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Penin- sula.	Madras.	Nizam's Guaran- teed State.	North West- ern.	Oudh and Rohil- khand.	Assam- Bengal.
COACHING TRAFFIC—contd.												
UNITS AND UNIT-MILEAGE—contd.												
Average number of units in a train—												
36	1st class No.	1st half	1.33	1.91	1.12	1.35	2.22	2.70	1.13	1.21	1.31	0.99
		2nd "	1.19	1.50	1.27	1.31	2.41	1.91	0.69	1.06	1.08	0.95
37	2nd " "	1st half	3.05	12.06	2.90	3.12	8.69	8.36	7.25	3.04	3.54	1.63
		2nd "	3.72	10.09	3.55	3.88	8.34	9.14	5.42	5.58	3.60	1.64
38	3rd or intermediate class "	1st half	6.83	14.10	15.56	14.08	17.00	2.76	123.91 91.16	11.86	10.98	1.12
		2nd "	8.22	13.42	18.13	15.97	15.95	2.12		12.14	14.12	1.24
39	4th or lowest " "	1st half	239.52	211.69	162.77	223.38	146.63	248.44	132.29 97.18	165.68	155.92	167.61
		2nd "	195.85	189.10	137.42	204.18	125.18	204.12		134.71	130.03	138.95
40	Total passenger units "	1st half	250.73	229.76	182.35	241.91	174.54	262.38		181.79	175.75	171.37
		2nd "	205.98	214.11	160.77	225.34	151.88	217.32		171.44	148.83	142.78
41	Other coaching traffic Tons	1st half	1.50	2.78	1.29	2.47	2.57	3.00	1.52	1.29	1.18	1.22
		2nd "	1.37	2.74	1.43	2.12	2.15	2.32	0.95	1.68	1.05	1.26
VEHICLES AND VEHICLE MILEAGE—												
Number of coaching vehicles hauled one mile (in thousands)—												
42	1st class Vehicle-miles	1st half	1.447	826	1,115	4,410	5,655	1,495	395	4,592	1,717	446
		2nd "	1.474	867	1,213	4,545	6,144	1,373	468	4,792	1,686	532
43	2nd " "	1st half	1.247	2,071	1,076	5,693	5,997	1,648	362	4,002	1,516	437
		2nd "	1,350	2,134	1,166	5,853	6,492	1,663	461	4,867	1,432	521
44	3rd or intermediate class "	1st half	1,220	1,044	1,880	3,556	3,979	2.78	1,570 1,742	5,331	2,544	289
		2nd "	1,315	1,217	2,008	6,217	4,086	159		5,597	2,605	217
45	4th or lowest " "	1st half	11,641	9,652	7,005	37,350	23,127	9,741	32,446 36,180	9,710	3,358	3,358
		2nd "	12,820	9,063	7,382	36,497	23,736	10,053		9,230	3,496	3,496
46	Other vehicles "	1st half	1,015	1,744	1,594	5,520	6,519	1,638	201	3,408	1,125	540
		2nd "	955	1,925	1,604	5,709	6,706	1,472	187	4,282	1,473	570
47	Brake-vans "	1st half	2,157	1,435	1,068	6,521	6,801	2,279	352	6,655	2,409	359
		2nd "	2,421	1,515	1,097	6,117	6,594	2,713	437	6,628	2,419	405
48	Total "	1st half	18,727	16,775	13,798	63,050	51,698	17,059	2,887	57,034	19,021	5,422
		2nd "	20,333	17,351	14,470	64,938	53,758	17,463	3,295	62,320	18,815	5,741
Average number of vehicles in a coaching train—												
49	1st class No.	1st half	1.24	0.73	1.21	1.17	1.55	1.41	1.28	1.13	1.08	1.51
		2nd "	1.17	0.74	1.24	1.21	1.60	1.13	1.19	1.08	1.06	1.64
50	2nd " "	1st half	1.06	1.84	1.17	1.51	1.65	1.56	1.16	1.13	0.95	1.48
		2nd "	1.06	1.63	1.19	1.56	1.59	1.37	1.18	0.10	1.90	1.61
51	3rd or intermediate class "	1st half	1.04	0.92	2.04	1.47	1.09	0.24	5.01 4.45	1.31	1.60	0.96
		2nd "	1.04	1.04	2.05	1.66	1.08	0.16		1.27	1.63	0.67
52	4th or lowest " "	1st half	9.93	8.55	7.61	9.84	6.36	9.21	7.95 8.18	7.95	6.11	11.40
		2nd "	10.14	8.28	7.54	9.74	6.17	8.29		8.18	5.79	10.78
53	Other vehicles "	1st half	0.87	1.54	1.74	1.46	1.80	1.55	0.64	0.83	0.71	1.83
		2nd "	0.76	1.65	1.64	1.52	1.74	1.21	0.48	0.97	0.92	1.76
54	Brake-vans "	1st half	1.84	1.27	1.16	1.72	1.76	2.16	1.14	1.63	1.52	1.22
		2nd "	1.92	1.83	1.12	1.63	1.71	2.24	1.11	1.50	1.53	1.25
55	Total "	1st half	15.98	14.85	14.93	16.67	14.21	16.13	9.21	13.98	11.97	18.40
		2nd "	16.09	14.67	14.78	17.34	13.97	14.40	8.41	14.10	11.82	17.71
Average earnings per coaching vehicle per mile—												
56	1st class Pies	1st half	16.22	26.44	12.67	16.97	15.60	23.27	13.42	12.33	14.22	10.78
		2nd "	13.58	20.68	13.92	15.42	16.22	21.29	8.83	11.39	12.24	9.40
57	2nd " "	1st half	19.07	29.85	16.98	14.04	23.53	26.67	29.42	14.05	19.82	8.86
		2nd "	20.85	27.36	16.83	15.45	22.49	26.68	22.51	15.36	21.58	7.97
58	3rd or intermediate class "	1st half	22.16	45.74	23.60	31.13	46.15	51.02	50.71 42.31	27.86	28.34	4.71
		2nd "	25.17	38.55	23.60	28.81	44.57	61.41		28.90	26.14	7.25
59	4th or lowest " "	1st half	57.41	55.49	52.28	53.64	49.74	60.56	42.78 42.78	47.06	63.08	48.30
		2nd "	45.53	52.02	46.23	46.25	48.79	51.82		42.78	54.79	37.21
60	Other vehicles "	1st half	69.47	53.36	32.23	51.51	49.44	69.85	109.60	54.92	67.73	28.58
		2nd "	73.04	47.56	43.76	49.68	45.71	68.67	70.78	59.26	46.72	26.43

DIX 18—continued.

system during each half-year of 1906—contd.

do not prepare these statistics.

3' 3 1/2"											2' 6"				GAUGE.	
12 (a) & (b)	14 (a) to (d)	15 (a)	3 (b) and (c)	8 (c)	18 (a) to (c)	2 (y) to (m)	20 (a) & (b)	21 (a) to (f)	22 (a) to (j)	23 (a)	1 (b)	30 (a)	9 (h) & (i)	1 (c)	Number.	
Bengal and North-Western.	Bhavnagar-Gondal-Junnagar-Porbandar.	Burma.	Eastern Bengal.	Hyderabad-Godavari Valley.	Jodhpur-Bikaner.	Rajputana-Malwa.	Rohilkhand and Kumaon.	South Indian.	Southern Mahratta.	Udaipur-Cihtar.	Jubbulpore-Gondia extension.	Kalka-Simla.	Kharahat-Kohat-Thal and Nowshera-Durgai.	Raipur-Dhamtari.	Calendar year 1906 by half-years.	
0.36 0.31	1.00 1.04	1.44 1.28	0.91 0.92	0.53 0.58	1.16 0.71	0.74 0.52	0.90 0.77	1.06 0.85	0.96 1.00	1.63 0.78	0.75 0.65	2.99 4.04	0.73 0.67	0.48 0.23	1st half 2nd "	36
0.96 0.97	6.52 6.71	3.64 3.27	2.55 1.67	5.99 6.10	2.81 2.75	2.16 2.13	5.63 4.94	5.36 3.55	3.79 3.62	3.94 1.97	1.63 1.35	5.48 7.15	1.10 1.06	0.54 0.49	1st half 2nd "	37
3.95 4.11	7.48 7.93	...	12.11 8.73	...	7.48 7.49	5.69 5.13	2.34 2.27	...	...	0.40 2.45	1.26 0.86	...	1.02 0.54	2.92 1.81	1st half 2nd "	38
224.21 196.87	217.96 203.63	223.13 175.02	179.98 193.13	135.08 120.64	197.59 182.45	213.51 190.89	221.84 178.75	297.67 261.94	173.64 159.41	377.90 193.03	317.92 227.96	48.42 54.85	104.38 100.42	158.25 122.09	1st half 2nd "	39
229.48 202.26	232.96 219.31	228.21 179.57	195.55 204.45	141.60 127.32	209.04 193.40	222.10 198.67	230.71 186.78	304.09 266.34	178.39 164.03	383.92 198.22	321.56 130.82	56.89 66.04	107.23 102.71	162.19 124.62	1st half 2nd "	40
0.60 0.71	1.27 0.99	0.99 0.94	1.18 1.50	0.79 0.60	1.23 1.33	1.07 1.50	0.97 0.85	0.74 0.69	1.35 1.12	2.43 1.35	0.84 0.68	1.42 1.71	0.36 0.29	0.65 0.47	1st half 2nd "	41
2,214 2,237	314 310	1,528 1,556	930 854	331 331	330 351	2,420 2,501	307 371	1,326 1,445	1,423 1,433	22 28	67 76	36 42	35 42	6 6	1st half 2nd "	42
1,907 1,967	414 430	1,907 1,911	769 799	858 363	350 348	2,310 2,431	259 328	1,413 1,559	1,407 1,498	29 22	66 76	37 41	35 41	6 6	1st half 2nd "	43
2,274 2,212	300 341	...	1,465 1,560	...	438 448	1,112 1,214	168 158	...	...	6 28	39 45	...	50 43	...	1st half 2nd "	44
20,117 20,661	2,450 2,451	15,051 15,630	7,145 7,634	1,082 1,609	3,525 3,746	24,994 27,095	2,352 2,679	16,926 17,420	11,577 11,229	332 266	1,248 1,308	152 154	478 635	138 124	1st half 2nd "	45
441 449	127 131	1,069 936	928 888	154 147	317 367	1,703 1,830	58 146	2,080 2,048	1,424 1,197	6 8	49 81	...	37 104	7 7	1st half 2nd "	46
2,799 3,250	474 417	1,484 1,405	783 824	299 296	912 933	4,221 4,880	564 418	1,116 1,060	1,646 1,613	54 52	49 53	71 78	76 60	19 21	1st half 2nd "	47
29,752 30,776	4,079 4,110	20,984 21,498	11,970 12,559	2,824 2,746	5,872 6,103	36,760 39,951	3,708 4,100	22,891 23,562	17,477 16,970	449 404	1,518 1,729	299 315	711 925	176 164	1st half 2nd "	48
1.75 1.64	1.60 1.70	1.53 1.51	1.46 1.22	1.07 1.07	1.24 1.16	1.34 1.23	1.77 1.78	1.14 1.18	1.43 1.44	1.30 1.03	1.34 1.29	1.04 1.37	0.46 0.47	0.59 0.53	1st half 2nd "	49
1.51 1.45	2.19 2.34	1.91 1.86	1.21 1.15	1.15 1.18	1.31 1.15	1.28 1.22	1.49 1.38	1.24 1.29	1.41 1.51	1.68 0.84	1.34 1.29	1.08 1.34	0.46 0.45	0.59 0.53	1st half 2nd "	50
1.80 1.62	1.18 1.87	...	2.29 2.24	...	1.64 1.49	0.62 0.61	0.97 0.76	...	...	0.37 1.05	0.78 0.74	...	0.66 0.47	...	1st half 2nd "	51
15.93 15.17	12.94 13.41	15.03 15.21	11.20 10.05	5.42 5.22	13.20 12.41	13.88 13.55	13.59 12.89	14.53 14.18	11.64 11.28	19.46 9.96	25.20 23.10	4.39 5.07	6.29 7.00	...	1st half 2nd "	52
0.35 0.33	0.67 0.72	1.07 0.91	1.45 1.27	0.50 0.47	1.19 1.22	0.95 0.91	0.34 0.71	1.78 1.67	1.43 1.20	0.36 0.29	0.99 1.36	...	0.49 1.15	0.09 0.56	1st half 2nd "	53
2.23 2.39	2.50 2.45	1.43 1.43	1.15 1.18	0.96 0.96	3.41 3.09	2.35 2.44	3.26 2.01	0.96 0.86	1.66 1.62	3.13 1.98	0.99 0.90	2.15 2.57	1.00 0.66	1.73 1.70	1st half 2nd "	54
23.56 22.60	21.54 22.40	20.96 20.92	18.76 18.01	9.10 8.90	21.99 20.52	20.42 19.98	21.42 19.73	19.65 19.18	17.57 17.05	26.30 15.10	30.64 29.08	8.66 10.35	9.36 10.20	10.42 18.44	1st half 2nd "	55
2.67 2.44	6.82 6.89	15.31 12.92	8.61 10.43	5.69 6.33	10.83 9.29	7.81 5.72	13.02 12.00	11.03 8.43	10.36 10.69	23.08 13.20	8.85 7.81	165.93 169.44	18.60 16.63	12.62 6.45	1st half 2nd "	56
3.88 4.10	16.81 16.10	15.38 18.60	14.12 13.98	23.67 26.18	13.43 15.53	10.89 11.44	29.42 27.11	18.73 15.57	15.72 14.29	21.06 21.68	5.73 8.20	163.11 171.02	13.85 13.04	7.33 6.74	1st half 2nd "	57
6.85 7.98	16.99 16.99	...	15.85 17.95	...	12.65 14.44	27.59 25.28	10.33 13.29	...	...	3.18 7.04	7.27 6.19	...	4.67 3.44	...	1st half 2nd "	58
26.07 25.96	46.32 41.74	44.44 34.13	40.17 43.45	49.83 43.28	30.81 30.24	30.97 28.30	35.13 29.77	41.49 37.75	31.14 29.48	38.79 38.69	25.23 19.40	115.85 113.53	37.34 32.26	38.05 37.00	1st half 2nd "	59
76.24 61.15	90.99 66.32	32.42 37.71	34.41 57.92	64.34 55.77	43.40 46.05	54.34 45.90	171.37 77.81	20.93 20.84	42.24 41.36	238.77 151.06	40.00 28.51	134.48 137.16	39.26 13.45	42.92 38.02	1st half 2nd "	60

Analysis of working of each railway

NOTE.—Railways not shown

Serial number.	PARTICULARS.	GAUGE. Number Calendar year 1906 by half- years.	5' 6"									
			1 (a)	2 (a) to (f)	3 (a)	4 (a) to (d)	5 (a) to (f)	6 (a) to (d)	8 (a) & (b)	9 (a) to (g)	10 (a) & (b)	11 (a)
			Bengal Nagpur.	Bom- bay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula.	Madras.	Nizam's Guaran- teed State.	North West- ern.	Ondh and Rohil- kand.	Assam- Bengal.
COACHING TRAFFIC—contd. VEHICLES AND VEHICLE-MILEAGE— contd. Carrying capacity hauled one mile (excluding brakes) (in thousands)—												
61	1st class Seals	1st half	13,043	20,573	23,553	64,100	77,723	14,572	4,965	82,586	38,880	5,218
		2nd "	12,929	21,217	25,744	67,210	85,297	13,988	5,938	85,873	37,609	6,143
62	2nd " "	1st half	17,207	69,053	26,188	123,544	160,682	28,341	7,991	90,302	34,423	5,099
		2nd "	18,523	70,229	28,451	127,421	175,708	28,468	10,232	130,371	32,417	6,067
63	3rd or intermediate class "	1st half	40,967	43,944	86,318	247,182	220,538	10,216	85,944 9,600	186,976	88,671	6,392
		2nd "	42,236	50,420	91,250	273,885	226,806	7,472		199,721	90,940	4,151
64	4th or lowest class "	1st half	617,361	526,199	395,326	1,942,311	1,175,214	571,048	9,600	1,714,313	535,284	118,075
		2nd "	668,275	521,784	416,261	2,014,669	1,207,637	589,838		1,913,161	537,438	121,315
65	Other vehicles Tons	1st half	8,432	8,704	15,179	54,669	33,549	9,787	1,243	43,896	25,570	1,656
		2nd "	7,205	9,471	13,619	46,303	34,209	8,378	1,482	58,516	27,096	1,732
Percentage of freight upon capacity hauled—												
66	1st class Per cent.	1st half	11.92	10.50	4.37	7.93	10.87	19.63	7.12	5.97	5.36	5.60
		2nd "	11.66	8.27	4.83	7.29	10.86	16.80	4.57	5.44	4.57	5.02
67	2nd " "	1st half	20.78	19.72	10.21	9.57	19.68	31.19	28.42	12.80	16.35	9.51
		2nd "	25.43	16.77	12.24	11.40	18.27	38.92	20.76	15.35	17.71	8.76
68	3rd or intermediate class "	1st half	19.54	36.25	16.58	21.51	28.04	28.60	45.18 37.37	25.87	26.85	5.17
		2nd "	21.60	31.04	19.24	21.84	27.05	34.13		26.86	24.75	9.61
69	4th or lowest class "	1st half	45.45	45.11	57.89	43.50	45.39	46.03	37.37	39.43	43.85	41.82
		2nd "	37.05	42.28	32.32	37.40	39.88	41.97		35.74	38.57	36.23
70	Other vehicles "	1st half	20.81	35.80	7.28	17.01	27.85	32.39	88.33	12.03	7.33	21.74
		2nd "	24.12	33.74	10.33	19.57	24.15	33.65	25.21	12.71	6.07	23.51
WEIGHT OF TRAIN AND TON- MILEAGE. Gross ton-mileage of all coaching trains (in thousands)—												
71	Freight Ton-miles	1st half	10,518	10,725	11,175	61,673	48,393	20,109	3,023	50,324	18,834	3,411
		2nd "	17,743	8,490	10,972	60,186	41,331	18,950	2,714	53,397	16,099	3,207
72	Dead weight "	1st half	284,543	262,098	219,875	1,089,171	880,104	250,611	41,902	879,032	348,384	51,142
		2nd "	314,233	279,676	233,849	1,128,691	936,024	265,837	47,161	993,112	353,051	56,696
73	Total "	1st half	304,061	289,023	241,050	1,153,844	928,497	270,720	44,925	929,256	367,218	54,553
		2nd "	331,976	298,166	244,821	1,188,877	980,355	284,787	49,875	1,047,109	369,150	59,903
74	Average weight of a coaching train— Freight Ton	1st half	16.66	17.46	12.15	17.10	13.30	19.01	9.65	12.31	11.85	11.58
		2nd "	14.04	15.85	11.21	16.07	11.52	15.63	6.92	12.08	10.10	9.89
75	Dead weight "	1st half	242.88	238.45	238.94	287.95	241.94	236.89	133.71	215.47	219.15	173.57
		2nd "	248.58	239.71	238.80	301.36	243.31	240.18	120.35	224.85	221.47	174.92
76	Total "	1st half	259.54	255.91	251.09	305.05	255.24	256.90	143.36	227.78	231.00	185.15
		2nd "	262.62	255.56	250.01	317.42	254.83	241.81	117.27	236.93	231.57	184.81
COST OF WORKING AND PROFITS—												
77	Average cost of hauling a coach- ing train one mile Rs.	1st half	1.17	1.75	1.94	1.11	1.41	1.65	1.22	1.28	1.12	2.04
		2nd "	1.33	1.84	1.76	1.17	1.51	1.95	1.26	1.23	1.14	1.93
78	Average cost of hauling a coach- ing vehicle with its load one mile Pies	1st half	15.94	24.71	26.98	11.60	21.68	22.61	14.76	19.84	20.56	22.79
		2nd "	18.08	26.09	24.75	11.81	23.59	30.86	14.62	18.72	21.30	22.46
Average cost of hauling a coach- ing unit one mile—												
79	Per passenger unit Pies	1st half	0.85	1.26	1.72	0.80	1.34	1.09	0.83	1.26	1.15	2.06
		2nd "	1.16	1.17	1.77	0.91	1.66	1.58	1.02	1.28	1.37	2.34
80	Other traffic per ton "	1st half	8.37	11.82	48.38	7.64	13.85	9.78	6.41	11.90	10.31	31.08
		2nd "	9.40	12.99	37.45	8.27	17.32	13.55	7.48	9.91	11.80	28.62
81	Average profit on working a coaching train one mile Rs. Average profit on working a coach- ing vehicle one mile—	1st half	2.14	1.76	0.85	2.34	1.28	2.27	2.78	1.25	1.55	0.02
		2nd "	1.70	1.56	0.87	2.04	0.89	1.22	1.80	1.23	1.18	0.61
82	1st class Pies	1st half	0.28	1.73	14.31	5.37	6.08	6.64	1.31	7.51	6.34	12.01
		2nd "	1.50	5.41	10.83	3.61	7.37	9.57	5.79	7.33	9.03	13.06
83	2nd " "	1st half	3.13	5.14	10.00	2.44	0.84	4.08	14.66	5.79	0.74	13.93
		2nd "	2.77	1.27	7.92	3.64	1.10	4.23	7.89	3.30	0.23	14.49
84	3rd or intermediate class "	1st half	6.23	21.03	4.38	19.53	24.47	28.41	35.95 27.69	7.52	7.78	18.08
		2nd "	7.09	12.46	1.15	17.00	20.98	30.55		10.18	4.84	15.27
85	4th or lowest class "	1st half	41.47	30.73	25.30	42.04	29.06	37.95	27.69	27.22	42.47	19.51
		2nd "	27.45	25.93	21.43	34.44	20.20	23.96		24.04	38.49	14.75
86	Other vehicles "	1st half	53.53	28.66	5.23	39.91	27.76	47.24	85.84	85.08	47.17	5.77
		2nd "	54.96	21.47	18.41	37.87	22.12	37.81	50.16	40.54	25.42	7.97

DIX 18—continued.

system during each half-year of 1906—contd.

do not prepare these statistics.

3' 3"											2' 6"				Gauges.	Serial number.
12 (a) & (b)	14 (a) to (d)	15 (a)	3 (b) & (c)	8 (c)	18 (a) to (c)	2 (g) to (m)	20 (a) & (b)	21 (a) to (f)	22 (a) to (j)	23 (a)	1 (b)	30 (a)	9 (h) & (i)	1 (e)	Number.	
Bengal and North-Western.	Bhavnagar-Gondal-Junagad-Porbandar.	Burma.	Eastern Bengal.	Hyderabad-Godavari Valley.	Jodhpur-Bikaner.	Rajputana-Malwa.	Rohilkund and Kumaon.	South Indian.	South-eastern Mah.	Udampur-Chitor.	Jubbulpore-Gondia extension.	Kalka-Simla.	Khushalgarh-Kohat-Thal and Nowshera-Durgai.	Raipur-Dhamtari.	Calendar year 1906 by half-years.	
20,269	3,242	15,255	10,556	6,202	3,451	23,623	4,741	11,589	11,601	269	166	470	433	38	1st half	} 61
21,604	2,410	15,509	9,497	6,110	2,809	25,381	8,392	14,387	11,615	297	220	476	581	39	2nd "	
28,151	5,840	31,663	9,271	8,101	4,109	27,722	3,759	16,691	17,486	345	199	637	433	38	1st half	} 62
29,425	4,856	32,566	9,607	8,173	2,763	29,178	7,861	17,503	18,650	262	191	563	566	39	2nd "	
49,447	5,275	...	27,681	...	11,269	27,854	3,780	...	...	153	133	...	1,418	...	1st half	} 63
50,653	5,564	...	20,663	...	11,497	30,582	6,508	...	...	679	128	...	1,247	...	2nd "	
602,082	74,206	430,747	210,408	89,179	111,294	818,284	93,027	555,010	370,790	9,752	31,189	3,817	11,468	4,310	1st half	} 64
605,955	70,871	464,300	229,073	84,716	117,892	868,551	169,833	570,891	362,730	7,727	34,958	3,707	15,306	3,896	2nd "	
1,294	494	3,418	5,108	715	3,874	8,902	294	5,081	3,947	25	86	298	111	11	1st half	} 65
1,593	510	2,558	4,669	652	4,416	8,509	5,190	5,233	3,402	32	149	313	312	10	2nd "	
2-25	5-84	9-49	5-49	2-65	8-96	5-68	3-60	10-71	8-23	10-66	22-33	22-00	12-76	13-65	1st half	} 66
1-94	7-87	8-32	6-79	2-90	7-67	4-06	1-90	7-24	8-57	6-87	16-76	26-23	10-47	7-34	2nd "	
4-29	21-88	11-51	17-54	22-96	17-91	1-4-02	25-96	36-72	21-57	19-54	40-50	29-78	19-29	15-43	1st half	} 67
4-50	25-26	10-32	12-15	23-04	23-84	14-59	13-04	24-87	19-30	20-12	41-84	38-67	17-28	15-17	2nd "	
10-08	25-85	...	27-91	...	17-72	36-79	10-71	...	...	4-43	47-19	...	5-36	...	1st half	} 68
11-05	26-03	...	29-45	...	19-66	33-53	7-14	...	...	9-68	40-34	...	3-95	39-04	2nd "	
47-03	55-61	49-56	54-57	46-85	47-41	46-27	40-80	62-48	16-59	66-18	50-58	43-92	69-15	...	1st half	} 69
44-25	52-50	48-74	53-80	43-92	46-72	42-96	21-87	56-37	43-74	66-84	38-78	45-07	59-48	...	2nd "	
58-21	48-73	28-87	14-67	34-19	8-41	33-71	57-07	17-09	34-13	167-56	48-48	16-48	24-88	63-05	1st half	} 70
60-55	35-59	37-83	22-36	28-62	9-10	31-57	5-41	16-23	32-70	113-02	27-03	16-64	8-50	55-83	2nd "	
18,182	2,020	14,835	8,237	2,925	3,702	27,119	2,591	22,289	12,110	438	1,000	175	520	112	1st half	} 71
17,536	2,618	12,162	9,643	2,571	3,930	26,961	2,532	20,615	11,020	356	867	182	599	97	2nd "	
218,403	27,026	186,842	88,574	31,977	46,392	286,896	31,010	180,292	146,015	3,394	9,781	2,687	3,977	675	1st half	} 72
241,105	26,737	198,300	94,696	31,516	49,876	316,934	51,641	189,643	143,963	3,330	11,290	2,550	5,069	665	2nd "	
236,585	29,946	201,677	96,811	34,902	50,094	314,015	33,001	202,581	1-8,165	4,032	10,781	2,862	4,497	767	1st half	} 73
258,701	29,555	210,462	104,344	34,487	53,806	343,895	57,173	210,258	151,983	3,680	12,157	2,732	5,658	762	2nd "	
11-40	15-42	14-82	12-91	9-42	13-87	13-88	14-96	19-13	12-17	25-61	20-20	5-06	6-85	10-42	1st half	} 74
12-88	11-33	11-83	13-84	8-34	13-02	13-49	12-19	16-78	11-07	13-31	14-58	5-98	6-70	7-96	2nd "	
172-96	142-75	186-62	188-86	103-63	173-73	148-69	179-06	154-77	146-80	210-47	197-43	77-62	52-34	62-75	1st half	} 75
191-75	146-33	192-92	185-78	103-48	165-23	158-71	262-95	154-36	144-64	124-43	189-86	83-70	55-91	54-35	2nd "	
187-36	158-17	201-44	151-77	112-45	187-60	161-97	194-02	173-90	158-97	236-68	217-63	82-68	59-19	73-17	1st half	} 76
204-63	160-96	204-75	149-62	111-82	178-25	172-00	275-14	171-14	155-71	137-74	204-44	89-68	62-41	62-31	2nd "	
0-91	1-39	1-68	1-69	1-51	1-06	1-15	1-31	1-62	1-16	1-91	1-83	2-56	1-30	0-71	1st half	} 77
1-04	1-64	1-80	1-28	1-65	1-44	1-21	1-07	1-40	1-37	1-52	1-57	3-73	1-11	0-75	2nd "	
8-14	13-97	16-57	18-48	21-46	10-94	12-22	13-82	16-60	13-98	15-89	11-93	56-85	29-73	9-31	1st half	} 78
9-68	15-67	17-76	14-58	24-18	15-85	12-27	21-36	14-68	17-03	22-40	10-68	69-08	22-39	12-30	2nd "	
0-74	1-10	1-34	1-51	1-16	0-91	0-93	1-06	0-93	1-13	0-98	1-05	6-53	2-17	0-80	1st half	} 79
0-97	1-38	1-81	1-05	1-42	1-33	1-10	1-24	0-92	1-47	1-42	1-25	8-08	1-83	1-10	2nd "	
5-09	8-61	16-79	25-21	12-95	10-85	7-90	5-70	37-61	15-28	4-05	11-27	85-04	44-82	11-45	1st half	} 80
4-85	12-55	16-44	20-33	18-06	14-92	9-20	19-52	33-58	19-17	7-10	16-89	106-15	88-23	16-76	2nd "	
1-68	1-40	2-25	1-25	1-88	1-60	1-57	1-88	1-91	1-23	2-82	1-85	3-40	0-12	2-05	1st half	} 81
1-27	1-95	1-32	1-94	0-98	1-07	1-20	0-70	1-73	0-81	0-92	1-10	3-51	0-23	1-35	2nd "	
-5-47	-7-15	-1-26	-9-87	-15-77	-0-11	-4-41	-0-80	-5-57	-3-62	7-19	-2-98	108-18	-11-13	3-31	1st half	} 82
-7-44	-8-78	-4-84	-4-16	-17-85	-6-50	-7-55	-9-39	-0-25	-6-34	-9-20	-2-87	100-36	-5-76	-5-85	2nd "	
-4-26	2-81	-1-19	-4-36	2-21	2-49	-1-33	15-60	2-13	1-74	5-17	-2-10	106-26	-15-88	-1-08	1st half	} 83
-5-78	0-43	-4-16	-0-80	1-95	-0-33	-1-83	5-72	0-89	-2-74	-0-72	-2-48	102-00	-8-65	-5-56	2nd "	
-1-29	4-92	...	-2-63	...	1-71	15-37	-3-49	...	...	-12-71	-4-56	...	-25-06	...	1st half	} 84
-1-90	1-32	...	3-87	...	-1-41	12-01	-8-10	...	...	-14-36	-4-49	...	-18-95	...	2nd "	
19-98	32-35	27-87	21-69	28-37	19-87	18-78	21-31	24-89	17-16	22-90	13-40	59-00	7-61	28-74	1st half	} 85
15-98	26-07	16-87	28-87	22-05	14-39	15-03	8-88	22-07	12-45	16-29	8-72	44-50	9-87	24-70	2nd "	
68-10	76-42	15-85	15-98	42-88	32-48	42-12	157-55	4-32	28-26	222-88	28-17	77-63	9-53	33-61	1st half	} 86
71-27	50-65	19-95	43-34	31-59	30-20	32-63	56-42	6-16	24-83	122-66	12-69	68-08	-8-94	25-72	2nd "	

Analysis of working of each railway

NOTE.—Railways not shown

Serial number.	PARTICULARS.	GAUGE. Number. Calendar year 1906 by half- years.	5' 6"										11 (a) Assam- Bengal.
			1 (a)	2 (a) to (f)	3 (a)	4 (a) to (d)	5 (a) to (f)	6 (a) to (d)	8 (a) & (b)	9 (a) to (g)	10 (a) & (b)		
			Rengal- Nagpur.	Bom- bay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula.	Madras.	Nizam's Guaran- teed State.	North West- ern.	Oudh and Bohil- kund.		
COACHING TRAFFIC—concl'd. COST OF WORKING AND PROFITS— concl'd. Average profit on working a coaching unit one mile—													
87	Per passenger unit Pies	{ 1st half 2nd "	1'67 1'36	1'20 1'04	0'91 0'93	1'63 1'49	1'11 0'85	1'37 0'83	1'47 1'29	1'16 1'16	1'49 1'27	0'95 0'70	
88	Other traffic per ton "	{ 1st half 2nd "	31'71 30'76	18'05 14'68	—1'89 11'76	2'85 23'03	20'50 19'78	26'32 22'30	36'12 27'98	23'54 24'21	30'37 26'14	11'75 13'95	
GOODS TRAFFIC. GROSS RECEIPTS AND TRAIN MILEAGE— (In thousands.)													
89	Receipts from goods traffic Rs	{ 1st half 2nd "	91'07 77'17	86'37 59'90	25'04 57'65	2,86'86 2,75'19	2,56'80 1,86'09	66'41 61'20	18'84 15'98	2,29'81 2,28'55	41'24 36'02	8'57 13'83	
90	Goods train-miles run No.	{ 1st half 2nd "	1,865 1,781	783 616	604 816	4,917 4,871	4,527 3,690	1,439 1,355	410 331	4,954 4,884	1,052 947	464 513	
91	Average goods receipts per train-mile Rs	{ 1st half 2nd "	5'01 4'33	11'03 9'72	4'28 7'06	5'80 5'65	5'68 5'04	4'62 4'52	4'60 4'83	4'64 4'68	3'92 5'80	1'85 2'70	
UNITS AND UNIT-MILEAGE. (In thousands.)													
92	Tons of goods carried one mile Tons	{ 1st half 2nd "	368,659 310,950	233,263 169,964	103,694 141,073	1,356,224 1,318,323	763,983 567,830	201,870 183,271	61,676 52,158	982,398 984,483	164,297 144,723	35,095 52,488	
93	Average sum received for carrying a ton one mile Pies	{ 1st half 2nd "	4'90 4'77	7'11 6'77	1'80 7'85	4'06 4'01	6'46 6'29	6'32 6'41	5'80 5'88	4'49 4'46	4'82 4'78	4'69 5'03	
94	Average number of tons in a train Tons	{ 1st half 2nd "	197'65 171'57	298'00 275'74	171'11 172'78	274'13 270'61	168'77 153'49	140'29 135'27	115'12 113'93	198'32 201'59	156'23 152'85	75'58 102'35	
VEHICLES AND VEHICLE-MILEAGE— Number of goods vehicles hauled one mile— (In thousands.)													
95	Loaded Vehicle-miles	{ 1st half 2nd "	34,589 29,813	26,381 20,005	10,617 13,048	121,180 120,506	85,298 68,729	25,512 23,799	5,576 4,432	91,597 92,021	22,345 18,346	5,993 8,135	
96	Empty "	{ 1st half 2nd "	16,219 14,330	6,175 4,825	3,077 4,149	62,033 59,238	25,495 19,173	9,359 9,070	3,298 2,555	26,510 25,764	6,050 5,607	2,204 2,023	
97	Brake-vans "	{ 1st half 2nd "	3,268 2,911	714 541	607 784	5,058 5,309	9,315 7,040	2,530 2,383	781 567	4,985 4,859	950 814	492 567	
98	Total "	{ 1st half 2nd "	54,076 47,684	33,270 25,391	14,301 18,281	188,271 185,053	120,108 94,942	37,410 35,152	9,635 7,554	123,092 122,644	29,345 24,767	8,689 10,726	
Average number of vehicles in a goods train—													
99	Freight vehicles No.	{ 1st half 2nd "	27'24 25'12	41'59 40'23	22'60 21'43	37'04 36'90	24'47 23'82	24'24 24'26	17'14 15'26	23'84 24'12	27'00 25'30	17'65 19'81	
100	Brake-vans "	{ 1st half 2nd "	1'75 1'65	0'91 0'91	1'00 0'96	1'02 1'09	2'06 1'91	1'76 1'69	1'47 1'24	1'01 1'00	0'90 0'86	1'06 1'10	
101	Total "	{ 1st half 2nd "	28'99 26'77	42'50 41'19	23'60 22'39	38'06 37'99	26'53 25'73	26'00 25'95	18'61 18'50	24'85 25'12	27'90 26'16	18'71 20'91	
102	Average earnings per goods vehicle per mile (excluding brakes) Pies	{ 1st half 2nd "	35'55 33'12	50'94 46'31	36'37 60'54	30'06 29'40	44'52 40'65	36'56 35'75	40'76 43'91	37'36 37'26	27'89 28'88	20'08 26'15	
103	Carrying capacity hauled one mile (excluding brakes) Tons	{ 1st half 2nd "	816,535 728,634	445,527 341,076	181,159 234,874	2,682,437 2,689,275	1,592,679 1,269,302	499,034 472,158	134,193 108,080	1,812,853 1,859,875	361,747 311,366	77,824 95,922	
104	Percentage of freight upon capacity hauled Per cent.	{ 1st half 2nd "	45'14 42'68	52'36 49'83	56'31 60'06	50'56 49'02	47'97 44'74	40'45 38'82	45'96 43'26	54'19 52'93	45'42 46'48	45'10 54'72	
105	Average load of a goods vehi- cle (including both loaded and empty) per mile Tons	{ 1st half 2nd "	7'26 6'94	7'17 6'85	7'57 8'06	7'40 7'83	6'90 6'46	5'79 5'58	6'95 7'47	6'82 8'36	5'79 6'04	4'28 5'17	
106	Average load of a loaded goods vehicle per mile "	{ 1st half 2nd "	10'66 10'43	8'84 8'50	9'77 10'81	11'19 10'94	8'96 8'26	7'91 7'70	11'06 11'77	10'73 10'70	7'35 7'89	5'86 6'45	
WEIGHT OF TRAIN AND TON- MILEAGE— Gross ton-mileage of all goods trains— (In thousands.)													
107	Freight Tons	{ 1st half 2nd "	368,659 310,950	233,263 169,964	103,694 141,073	1,356,224 1,318,323	763,983 567,830	201,870 183,271	61,676 52,158	982,398 984,483	164,297 144,723	35,095 52,488	
108	Dead weight "	{ 1st half 2nd "	533,083 474,796	279,494 216,447	151,281 196,828	1,723,976 1,606,745	1,246,954 997,125	369,852 348,443	102,688 81,490	1,228,235 1,246,883	275,065 241,196	58,689 70,589	
109	Total "	{ 1st half 2nd "	901,692 785,746	512,757 386,411	254,975 337,901	3,080,200 3,015,068	2,010,937 1,564,955	571,222 531,714	164,364 133,646	2,210,633 2,230,868	439,362 385,919	93,784 123,077	

DIX 18—continued.

system during each half-year of 1906—contd.

do not prepare these statistics.

3' 34"											2' 6"				GAUGE.		Serial number.
12 (a) & (b)	14 (a) to (d)	15 (a)	3 (b) & (c)	8 (c)	18 (a) to (c)	2 (g) to (m)	20 (a) & (b)	31 (a) to (f)	23 (a) to (j)	23 (a)	1 (b)	30 (a)	9 (h) & (i)	1 (e)	Number.		
Bengal and North-Western.	Blay-nagar-Gondal-Junnad-Porbandar.	Barnua.	Eastern Bengal.	Hyder-abad-Godavari Valley.	Jodhpur-Bikaner.	Rajputana-Malwa.	Rohilkund and Kumaon.	South Indian.	South-ern Mah-aratta.	Udaipur-Chitor.	Jubbulpore-Gondia extension.	Kalka-Simla.	Khushal-garh-Kohat-Thal and Nowshera Dargai.	Raipur-Dham-tari.	Calendar year 1906 by half-years.		
1'31 1'08	1'81 1'54	1'82 1'50	1'13 1'61	0'98 0'77	1'28 0'87	1'19 1'02	1'34 0'51	1'17 1'20	1'11 0'78	1'21 3'71	1'02 0'83	6'37 5'39	0'19 0'52	2'28 1'36	1st half 2nd "	87	
39'56 34'33	39'08 35'6	18'02 20'02	17'37 28'91	27'58 25'79	31'41 27'19	22'94 18'69	53'94 41'65	13'60 16'50	29'38 25'35	31'57 26'31	32'88 30'42	119'61 99'64	8'81 35'33	33'02 28'64	1st half 2nd "		88
41'81 36'47	5'76 3'25	46'10 36'37	25'53 31'27	12'27 6'00	14'94 10'18	1'00'32 75'39	7'00 5'13	31'61 31'06	4'17 32'95	60 3-	2'14 1'87	1'47 1'81	72 75	35 21	1st half 2nd "	89	
1'28 1'185	144 92	1'554 1'584	617 683	3'52 229	397 335	2'328 1'933	2'19 1'73	1'103 1'171	1'516 1'368	11 9	98 100	33 41	116 130	20 18	1st half 2nd "		90
3'46 3'21	3'99 3'52	2'97 2'37	4'16 4'38	3'79 3'02	3'77 3'04	4'31 3'86	3'19 2'97	2'87 2'65	2'72 2'52	5'49 4'9	2'19 1'72	4'24 1'08	0'62 0'66	1'4 1'15	1st half 2nd "	91	
149'127 123'658	11'719 6'959	1'9'113 1'2'0'3	55'556 77'326	26'065 15'910	42'700 28'536	09'618 251'291	19'784 17'415	86'550 83'978	132'010 191'448	693 474	5'669 7'152	666 1'014	1'004 1'825	758 602	1st half 2nd "		92
5'38 5'66	9'43 8'95	6'84 5'72	8'90 7'76	9'04 8'81	6'71 6'85	6'22 5'69	6'80 5'65	7'01 6'70	6'18 6'22	16'48 15'27	7'15 5'03	42'21 34'23	8'61 8'97	9'67 6'71	1st half 2nd "	93	
191'43 103'93	81'25 75'47	83'26 79'54	89'24 113'66	12'62 38'09	167'79 85'14	122'46 130'19	99'26 106'94	78'44 75'97	84'82 77'70	63'93 54'06	57'90 65'62	23'12 12'86	13'86 14'05	38'51 32'89	1st half 2nd "		94
25'286 22'327	2'778 1'738	25'704 24'696	12'080 12'959	4'035 2'787	6'384 5'538	16'048 45'712	3'112 2'417	17'371 17'841	26'351 21'279	176 128	1'545 1'574	183 250	705 716	202 129	1st half 2nd "	95	
9'701 11'118	1'297 726	10'091 9'735	2'24 2'215	1'558 1'066	2'818 2'491	18'958 15'028	1'759 1'219	5'697 6'831	8'8'1 6'537	104 59	543 838	104 59	266 274	107 74	1st half 2nd "		96
1'661 1'591	127 48	2'224 2'234	621 718	601 4'4	106 90	2'444 1'892	66 261	1'330 1'578	1'932 1'724	...	97 106	...	183 144	23 23	1st half 2nd "	97	
36'618 35'066	4'197 2'512	38'022 36'575	15'835 15'692	6'614 4'337	9'003 8'119	77'470 62'662	4'957 3'897	24'338 26'250	17'164 29'740	2'0 187	2'1'5 2'518	287 369	1'174 1'134	332 2'6	1st half 2nd "		98
28'49 20'49	28'22 26'72	27'03 22'39	24'66 22'22	12'09 9'76	23'18 13'95	32'21 31'11	23'22 21'07	20'91 21'06	22'64 21'26	25'74 21'37	21'33 22'13	8'08 6'96	8'87 7'62	15'74 11'11	1st half 2nd "	99	
1'75 1'40	0'83 0'52	1'43 1'46	1'01 1'05	1'40 1'22	0'27 0'27	1'05 0'97	0'39 1'52	1'20 1'35	1'24 1'32	...	6'99 0'97	...	1'78 1'11	1'15 1'23	1st half 2nd "		100
29'84 30'89	29'19 27'24	24'16 23'84	15'67 21'27	13'49 10'98	23'45 24'22	33'25 32'08	22'61 22'59	22'11 22'11	23'88 22'58	25'71 21'37	12'32 21'10	8'68 6'96	9'95 8'73	16'89 12'34	1st half 2nd "	101	
22'94 20'92	27'16 25'29	24'73 20'31	92'22 37'77	39'58 24'40	21'19 24'31	25'08 23'83	27'60 27'08	26'31 24'17	23'15 22'74	40'92 38'63	19'67 14'12	97'82 112'39	14'26 16'53	23'65 19'87	1st half 2nd "		102
346'025 330'219	31'344 18'416	290'152 278'205	121'615 134'5'4	64'810 40'738	88'996 73'86	637'219 5'6'50	55'482 41'723	170'0'1 184'567	260'811 256'188	2'761 1'596	16'775 19'379	2'6'0 4'310	4'340 4'426	2'274 1'480	1st half 2nd "	103	
43'15 37'44	38'50 37'81	41'60 43'85	45'26 57'48	40'67 36'92	48'05 36'41	47'11 47'37	35'66 41'74	50'8'9 48'21	50'61 40'30	19'42 31'43	13'79 36'92	32'63 43'92	37'05 41'24	33'61 40'67	1st half 2nd "		104
4'26 3'60	2'88 2'82	3'63 3'55	3'62 5'10	4'88 3'96	4'65 3'55	4'12 4'18	4'06 4'79	3'75 3'61	3'75 3'65	2'48 2'53	2'72 2'97	2'32 3'28	1'06 1'84	2'45 2'96	1st half 2nd "	105	
5'00 5'54	4'22 4'10	5'08 4'96	4'26 5'97	6'37 5'89	6'70 5'15	5'52 5'58	6'86 7'21	4'98 4'99	5'01 4'78	3'96 3'07	3'67 4'51	3'84 4'07	2'28 2'55	3'75 4'05	1st half 2nd "		106
149'127 128'658	11'718 6'959	120'411 122'033	58'556 77'327	26'065 15'040	42'760 28'537	09'618 254'291	19'784 17'415	86'550 88'979	132'010 191'448	696 474	5'669 7'152	666 1'014	1'004 1'825	757 602	1st half 2nd "	107	
174'155 179'070	19'358 11'794	221'120 216'586	88'278 99'062	41'871 28'375	49'790 48'118	356'209 192'203	25'593 21'451	145'056 158'430	197'931 160'961	1'489 1'0'5	12'846 14'692	2'359 2'786	4'954 5'201	1'418 1'0'8	1st half 2nd "		108
323'282 308'728	31'078 18'753	350'531 338'619	141'829 176'389	67'886 48'418	92'859 71'655	665'827 540'194	45'977 38'860	221'608 247'409	32'941 282'609	2'185 1'539	18'518 21'841	2'995 3'750	6'562 7'126	2'175 1'619	1st half 2nd "	109	
																	100

Analysis of working of each railway

NOTE.—Railways not shown

Serial number.	PARTICULARS.	GAUGE										
		Number	5' 6"									
			1 (a)	2 (a) to (f)	3 (a)	4 (a) to (d)	5 (a) to (f)	6 (a) to (d)	8 (a) & (b)	9 (a) to (g)	10 (a) & (b)	11 (a)
		Calendar year 1906 by half-years.	Bengal Nagpur.	Bombay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula.	Madras.	Nizam's Guaranteed State.	North West-ern.	Oudh and Rohil-khand.	Assam-Bengal.
	GOODS TRAFFIC— <i>concl.</i>											
	WEIGHT OF TRAIN AND TON-MILEAGE— <i>concl.</i>											
	Average weight of a goods train—											
110	Freight Tons	1st half 2nd "	197.65 174.57	298.00 275.74	171.11 172.78	274.13 270.64	168.77 153.88	140.99 135.27	119.12 113.93	194.32 201.59	156.22 152.85	75.58 102.35
111	Dead weight "	1st half 2nd "	285.73 269.55	357.06 351.14	240.63 241.07	319.47 348.32	275.47 270.23	256.69 257.19	198.34 177.99	247.95 255.22	281.55 254.74	126.39 137.54
112	Total "	1st half 2nd "	483.43 444.12	655.06 626.88	420.74 413.85	622.60 618.96	444.24 424.11	397.68 392.46	317.46 291.92	442.27 456.81	437.77 407.59	201.97 239.89
	COST OF WORKING AND PROFIT.											
113	Average cost of hauling a goods train one mile . . . Rs.	1st half 2nd "	2.19 2.24	4.47 4.52	3.24 2.91	2.27 2.23	2.45 2.51	2.55 2.27	1.74 1.76	2.50 2.37	2.02 2.01	2.22 2.50
114	Average cost of hauling a goods vehicle with its load one mile Pcs.	1st half 2nd "	15.41 17.13	20.65 21.52	27.55 26.12	11.76 11.84	19.20 20.21	20.22 25.86	15.39 16.03	20.13 18.86	14.39 15.27	24.20 24.23
115	Average cost of hauling a goods unit (viz., one ton) one mile "	1st half 2nd "	2.12 2.46	2.88 3.14	3.64 3.21	1.59 1.61	2.78 3.13	3.49 4.61	2.21 2.15	2.42 2.26	2.49 2.53	5.65 4.69
115 A	Average cost of hauling a goods unit one mile, including interest on capital expended on open line at the rate of 5 per cent. per annum "	1st half 2nd "	4.60 5.23	4.49 5.70	6.46 5.42	2.97 3.04	4.87 5.67	6.82 8.32	4.95 5.15	4.52 4.32	5.02 5.24	12.07 9.30
116	Average profit on working a goods train one mile . . . Rs.	1st half 2nd "	2.85 2.09	6.56 5.10	1.04 4.15	3.53 3.37	3.22 2.53	2.07 1.25	2.86 3.07	2.14 2.31	1.90 1.79	-0.37 0.20
117	Average profit on working a goods vehicle with its load one mile Pcs.	1st half 2nd "	20.14 15.99	30.29 24.79	8.82 34.42	18.30 17.56	25.32 20.41	16.34 9.89	25.37 27.88	17.23 18.40	13.50 13.61	-4.12 1.92
118	Average profit on working a goods unit (viz., one ton) one mile "	1st half 2nd "	2.74 2.31	4.23 3.63	1.16 4.61	2.47 2.40	3.68 3.16	2.83 1.77	3.65 3.73	2.67 2.20	2.33 2.25	-0.66 0.37
	DETAILED PERCENTAGES OF EARNINGS AND EXPENDITURE.											
	Percentage on Total Earnings—											
119	Coaching traffic Per cent.	1st half 2nd "	30.08 31.91	31.07 37.80	46.20 30.05	30.81 29.94	27.29 32.70	37.52 37.16	23.37 23.47	30.50 31.69	47.37 46.10	47.13 34.76
120	Goods traffic "	1st half 2nd "	66.82 61.34	67.77 60.59	46.83 67.25	67.65 63.45	71.57 65.88	60.08 59.21	72.96 70.97	67.92 66.52	46.04 45.93	46.33 58.38
121	Sundries, including tele-graph "	1st half 2nd "	2.71 3.24	1.16 1.61	6.88 2.70	1.24 1.26	1.14 1.42	2.40 3.63	3.67 5.56	1.58 1.79	6.59 7.97	5.94 6.33
122	Steam-boat earnings "	1st half 2nd "	0.39 0.51	...	...	0.30 0.35	...	...	...	...	...	0.60 0.13
	Total "	1st half 2nd "	100.00 100.00	100.00 100.00	100.00 100.00	100.00 100.00	100.00 100.00	100.00 100.00	100.00 100.00	100.00 100.00	100.00 100.00	100.00 100.00
	Percentage of Working Expenses on Total Earnings—											
123	Maintenance Percent.	1st half 2nd "	7.90 11.42	8.52 16.87	22.48 12.94	9.10 9.56	10.27 9.96	12.70 21.58	12.13 11.09	14.22 12.97	11.77 14.68	32.71 27.99
124	Locomotive expenses "	1st half 2nd "	13.82 15.75	17.83 20.18	17.29 12.13	10.12 10.68	19.32 23.23	18.63 23.12	10.48 10.92	24.14 23.12	17.80 18.42	21.55 20.60
125	Carriage and wagon expenses "	1st half 2nd "	4.22 4.75	5.76 5.99	5.74 3.72	4.98 4.55	4.28 5.42	5.51 7.02	3.28 3.32	3.60 3.40	3.77 3.17	6.36 6.89
126	Traffic expenses "	1st half 2nd "	7.74 9.43	6.48 7.85	18.04 14.62	8.01 9.00	7.12 9.23	7.53 7.92	5.88 6.16	7.36 7.97	9.41 10.94	12.50 13.43
127	General charges "	1st half 2nd "	4.58 5.88	4.00 5.02	3.54 4.30	3.23 3.68	3.50 4.35	4.60 5.32	4.76 5.50	2.83 2.88	4.13 4.76	14.61 11.68
128	Miscellaneous expenses "	1st half 2nd "	2.83 3.82	1.42 1.74	2.69 2.87	2.17 2.28	1.79 2.50	1.83 3.44	1.83 1.88	1.86 1.38	2.92 3.13	5.21 7.10
129	Steam-boat expenses "	1st half 2nd "	1.04 1.40	...	...	0.21 0.34	...	...	...	0.01 0.01	...	0.81 0.42
130	TOTAL WORKING EXPENSES "	1st half 2nd "	42.13 52.45	44.01 51.05	71.78 50.58	37.82 40.04	46.26 54.62	50.99 68.40	37.49 38.85	58.52 50.68	50.20 55.10	93.95 86.98

DIX 18—continued.

system during each half-year of 1906—contd.

do not prepare these statistics.

3' 3 1/2"											3' 6"				GAUGE.		Serial number.
12 (a) & (b)	14 (a) to (d)	15 (a)	3 (b) & (c)	8 (c)	18 (a) to (c)	12 (g) to (m)	20 (a) & (b)	21 (a) to (f)	22 (a) to (j)	23 (a)	1 (b)	30 (a)	9 (h) & (i)	1 (c)	Number.	Calendar year 1906 by half-years.	
Bengal and North-Western	Bhavnagar-Gondal Junagadh-Portbandar	Barma	Eastern Bengal	Hyderabad Gondwari Valley.	Jodhpur-Bikaner.	Rajputana-Mulwa	Rohilkhand and Kumaon.	South Indian.	Southern Mahratta.	Udaipur-Chitor.	Jubbulpore-Gondia extension.	Kalka-Simla.	Khushalgarh-Kohat-Thal and Nowshera-Dargai.	Raipur-Dhamtari.			
121.43 103.93	81.25 75.47	83.24 79.54	89.24 113.20	52.92 38.19	107.79 85.13	192.94 130.19	90.16 100.94	78.44 70.97	81.82 77.70	67.93 54.06	37.90 65.62	20.12 12.86	13.86 14.05	38.51 32.69	1st half 2nd "		110
141.81 157.74	134.22 127.90	142.28 141.16	144.71 145.10	85.00 71.88	125.51 128.64	152.99 149.61	116.75 124.34	131.46 115.27	127.17 123.04	136.58 121.60	131.22 134.80	70.34 61.66	42.71 40.05	72.66 56.71	1st half 2nd "		111
263.24 266.67	215.17 203.37	225.52 220.70	223.95 25.36	137.92 109.97	233.30 213.77	185.97 279.80	207.01 225.28	209.90 211.24	211.90 210.74	200.81 175.66	189.12 200.42	90.16 84.52	56.57 54.10	110.57 8.00	1st half 2nd "		112
1.27 1.46	1.89 2.07	1.89 1.94	2.61 2.21	1.65 1.70	1.32 1.73	1.89 1.97	1.39 1.62	1.95 1.73	1.55 1.76	1.63 1.95	1.59 1.51	2.80 3.51	1.24 0.96	1.68 1.08	1st half 2nd "		113
8.57 9.51	12.84 14.89	15.72 16.67	20.35 19.07	17.71 19.35	10.90 13.83	11.24 12.17	12.05 14.73	17.91 15.76	13.11 15.93	12.17 17.45	14.30 13.34	62.60 96.81	28.38 24.29	13.15 18.70	1st half 2nd "		114
2.01 2.57	4.16 5.27	4.35 4.69	5.62 3.74	4.05 4.96	2.34 3.89	2.72 2.91	2.97 3.07	4.77 4.87	3.50 4.86	4.90 6.90	5.27 4.50	26.76 29.49	17.14 13.18	5.37 6.32	1st half 2nd "		115
4.28 5.18	9.17 11.36	7.55 8.05	9.44 7.88	7.30 9.75	3.91 5.97	4.37 4.75	5.72 5.33	8.02 7.62	6.79 8.35	19.18 27.94	11.95 10.63	91.74 74.14	32.40 25.72	11.96 14.04	1st half 2nd "		115
2.13 1.75	2.10 1.45	1.08 0.43	1.55 2.37	2.05 1.32	2.45 1.31	2.42 1.89	1.60 1.35	0.92 0.92	1.18 0.76	3.88 2.34	0.69 0.18	1.62 0.57	-0.62 -0.30	0.86 0.07	1st half 2nd "		116
14.37 11.41	14.32 10.40	9.01 3.67	11.87 18.70	21.57 15.05	20.29 10.50	14.44 11.65	15.55 12.35	8.40 8.41	10.04 6.81	28.75 21.18	5.37 1.58	35.89 15.55	-14.12 -7.76	10.50 1.17	1st half 2nd "		117
3.37 3.09	4.07 3.68	2.49 1.03	3.28 4.02	4.09 3.85	4.37 2.96	3.50 2.78	3.83 2.58	2.24 2.33	2.68 1.85	11.58 8.37	1.98 0.53	15.45 4.74	-3.53 -1.21	4.30 0.39	1st half 2nd "		118
41.53 43.75	54.88 64.72	45.25 45.55	38.80 37.70	29.90 40.19	31.43 41.61	32.37 33.07	41.88 43.64	55.42 54.82	35.46 39.06	56.64 62.32	44.76 45.64	57.76 54.39	59.36 18.14	43.96 54.55	1st half 2nd "		119
49.28 48.32	48.41 32.04	52.98 51.74	52.82 52.48	67.72 56.59	66.21 55.94	66.23 59.66	53.14 44.02	42.73 43.94	65.23 50.22	41.85 35.90	52.56 53.11	40.81 44.59	39.74 40.84	55.34 44.75	1st half 2nd "		120
2.49 1.78	1.71 3.24	1.42 2.30	0.92 0.95	2.38 3.22	2.38 2.45	1.40 2.27	4.98 6.14	1.85 1.74	1.32 1.73	1.51 1.78	2.68 1.85	1.60 1.02	0.90 1.02	1.80 0.70	1st half 2nd "		121
6.70 6.15	...	0.35 0.41	7.36 8.87	...	...	...	...	...	...	...	...	...	...	...	1st half 2nd "		122
100.00 100.00	100.00 100.00	100.00 100.00	100.00 100.00	100.00 100.00	100.00 100.00	100.00 100.00	100.00 100.00	100.00 100.00	100.00 100.00	100.00 100.00	100.00 100.00	100.00 100.00	100.00 100.00	100.00 100.00	1st half 2nd "		
12.30 16.37	11.77 14.87	14.45 20.73	16.47 13.03	21.05 20.26	8.69 21.92	8.52 10.91	6.72 9.43	17.22 13.38	12.15 17.57	9.27 22.57	17.24 19.07	9.01 17.86	46.13 31.54	10.19 13.70	1st half 2nd "		123
9.71 11.38	11.40 12.45	18.69 25.24	14.85 9.60	10.50 14.28	15.59 19.35	17.84 20.27	14.51 15.02	20.09 20.38	20.48 24.83	12.12 15.59	19.07 22.80	20.57 22.90	40.55 34.71	15.44 17.29	1st half 2nd "		124
2.69 3.19	2.02 4.14	5.00 5.81	8.34 8.69	1.71 2.51	2.01 2.59	5.76 5.42	3.68 5.01	3.90 5.07	4.95 5.60	1.89 2.54	3.37 4.01	1.65 2.87	6.28 5.35	3.13 3.32	1st half 2nd "		125
6.95 7.72	7.22 8.64	8.64 10.52	9.84 9.36	6.76 10.00	5.12 6.71	6.48 7.88	7.49 8.78	7.61 7.68	7.56 9.09	6.89 7.94	12.01 15.89	8.72 13.24	22.37 21.19	5.82 7.70	1st half 2nd "		126
4.34 5.05	7.40 9.82	5.69 7.44	4.93 4.11	7.29 11.10	3.07 4.04	3.99 5.04	6.11 8.06	6.35 6.79	7.20 8.69	5.36 6.46	8.35 11.12	10.84 9.53	13.67 12.01	6.36 9.33	1st half 2nd "		127
0.68 1.50	1.01 1.70	2.02 1.32	2.22 1.42	0.94 2.19	2.17 2.48	1.42 1.74	1.29 1.42	1.20 1.42	1.96 1.90	1.91 1.63	1.49 2.17	0.13 1.02	3.80 4.43	0.60 0.82	1st half 2nd "		128
2.97 3.62	...	0.80 0.90	6.09 5.78	...	...	...	...	...	...	...	...	...	3.05 2.87	...	1st half 2nd "		129
39.79 49.81	44.02 51.02	55.29 71.66	62.74 46.99	48.25 60.34	36.65 57.09	44.01 51.26	39.80 47.72	56.37 54.72	54.28 67.68	36.94 56.73	61.53 75.19	51.22 67.43	197.25 112.25	42.34 62.16	1st half 2nd "		130

Analysis of working of each railway

NOTE.—Railways not shown

Serial number.	PARTICULARS.	GAUGE. Number Calendar year 1906 by half-years	5' 6"										11 (a) Assam-Bengal.
			1 (a) Bengal-Nagpur.	2 (a) to (f) • Bombay, Baroda and Central India	3 (a) Eastern Bengal.	4 (a) to (d) East Indian.	5 (a) to (f) Great Indian Peninsula	6 (a) to (d) Madras.	8 (a) & (b) Nizam's Guaranteed State.	9 (a) to (g) North Western.	10 (a) & (b) Oudh and Rohilkhand.		
PER MILE OF LINE, MAIN-TAINED			TABLE A—MAINTENANCE OF										
131a	General superintendence (including office expenses) Rs.	1st half 2nd „	140 19 156 09	191 10 183 59	261 85 201 24	228 59 230 49	150 48 151 93	170 69 182 39	146 03 155 54	148 82 149 54	140 44 135 41	146 78 150 88	
132a	Maintenance and renewal of permanent-way „	1st half 2nd „	251 99 354 14	474 82 721 42	1,353 69 8,00 63	609 36 810 29	714 07 461 51	443 77 58, 40	283 26 295 81	671 87 613 22	301 73 457 95	411 16 434 32	
133a	Repairs of bridges, &c. „	1st half 2nd „	91 97 60 36	143 87 157 36	385 64 492 89	255 20 172 64	215 61 165 47	126 06 414 63	359 10 199 72	58 98 65 37	190 05 70 87	121 47 142 56	
134a	Conservancy of rivers „	1st half 2nd „	„ „	„ „	5 54 0 64	„ „	„ „	„ „	0 08 „	10 05 13 74	0 28 1 57	„ „	
135a	Repairs of stations and buildings „	1st half 2nd „	103 36 1 0 70	136 02 113 24	331 48 383 46	252 30 287 35	145 33 130 00	91 20 122 93	44 62 2 80	209 19 192 92	166 20 131 54	67 06 72 13	
136a	Other charges (net) „	1st half 2nd „	40 31 73 66	84 31 85 92	163 32 19 24	161 35 171 29	85 92 89 24	184 15 278 42	60 04 19 91	145 17 121 41	89 00 83 83	14 50 17 31	
137a	Total maintenance, &c. „	1st half 2nd „	631 12 775 35	1,310 02 1,294 52	2,591 12 2,227 14	1,766 70 1,675 06	1,311 41 1,001 15	2,958 7 1,580 83	893 13 711 78	1,264 18 1,159 20	844 70 881 22	781 27 860 19	
PER MILE OF TRACK, INCLUDING SIDINGS.													
131b	General superintendence (including office expenses) Rs.	1st half 2nd „	119 62 132 12	137 84 122 71	163 50 185 67	145 17 116 18	107 61 108 51	124 48 150 61	129 83 138 23	115 65 116 08	121 63 117 53	129 95 136 21	
132b	Maintenance and renewal of permanent-way „	1st half 2nd „	217 13 300 10	504 18 482 21	845 21 524 29	513 90 514 59	510 63 331 75	366 69 400 97	250 80 262 90	577 63 475 62	261 64 307 47	364 02 384 41	
133b	Repairs of bridges, &c. „	1st half 2nd „	78 32 51 19	91 10 105 19	210 79 591 89	162 07 107 64	174 19 118 18	104 13 312 38	319 26 169 50	45 84 10 74	164 19 61 51	107 54 126 17	
134b	Conservancy of rivers „	1st half 2nd „	„ „	„ „	3 16 0 42	„ „	„ „	„ „	0 07 „	7 81 10 67	0 25 1 36	„ „	
135b	Repairs of stations and buildings „	1st half 2nd „	58 02 110 63	90 95 95 74	204 18 236 35	160 16 182 48	103 93 92 84	75 34 101 51	79 67 26 49	162 57 149 75	93 70 114 17	59 37 63 83	
136b	Other charges (net) „	1st half 2nd „	34 31 62 35	56 38 59 43	101 18 122 18	192 46 110 69	61 44 63 74	153 12 229 91	59 39 35 47	112 81 95 58	77 08 72 80	30 81 50 73	
137b	Total maintenance, &c. „	1st half 2nd „	537 40 656 50	87 95 86 24	1,561 77 1,327 71	1,08 85 1,033 78	937 82 715 62	822 67 1,305 38	791 65 632 90	98 34 89 84	722 80 764 84	691 19 761 35	
PER TOTAL TRAIN-MILE.													
131c	General superintendence (including office expenses) Rs.	1st half 2nd „	1 36 1 45	1 34 1 37	1 37 1 34	0 95 0 99	0 81 0 91	1 36 1 61	1 14 1 73	1 00 0 99	1 07 1 11	2 40 2 26	
132c	Maintenance and renewal of permanent-way „	1st half 2nd „	2 37 3 29	5 24 5 37	7 66 3 77	3 35 3 45	3 93 2 77	4 01 5 15	2 79 3 30	4 67 4 06	2 35 3 77	6 72 6 40	
133c	Repairs of bridges, &c. „	1st half 2nd „	0 85 0 56	1 00 1 17	2 01 2 19	1 06 0 74	1 19 0 99	1 14 3 66	3 55 2 13	0 40 0 13	1 45 0 59	1 99 2 10	
134c	Conservancy of rivers „	1st half 2nd „	„ „	„ „	0 03 „	„ „	„ „	„ „	„ „	0 06 0 09	„ 0 01	„ „	
135c	Repairs of stations and buildings „	1st half 2nd „	0 96 1 21	0 94 1 07	1 73 1 70	1 04 1 22	0 80 0 77	0 82 1 09	0 44 0 33	1 41 1 27	0 83 1 08	1 09 1 06	
136c	Other charges (net) „	1st half 2nd „	0 37 0 69	0 58 0 66	0 86 0 88	0 67 0 74	0 47 0 53	1 66 2 46	0 59 0 44	0 94 0 83	0 68 0 69	0 56 0 85	
137c	Total maintenance, &c. „	1st half 2nd „	5 85 7 20	9 09 9 64	13 06 9 88	7 07 7 14	7 22 5 97	8 99 13 97	8 81 7 93	8 52 7 67	6 38 7 25	12 76 12 67	
PER 1,000 GROSS TON-MILES.													
131d	General superintendence (including office expenses) Rs.	1st half 2nd „	0 20 0 25	0 20 0 22	0 27 0 25	0 12 0 13	0 14 0 17	0 25 0 31	0 25 0 80	0 18 0 17	0 23 0 23	0 77 0 65	
132d	Maintenance and renewal of permanent-way „	1st half 2nd „	0 87 0 56	0 78 0 88	1 30 0 7	0 43 0 14	0 68 0 51	0 75 1 01	0 47 0 56	0 84 0 72	0 48 0 79	2 15 1 83	
133d	Repairs of bridges, &c. „	1st half 2nd „	0 13 0 10	0 15 0 19	0 40 0 43	0 14 0 09	0 21 0 18	0 21 0 72	0 60 0 36	0 07 0 08	0 30 0 12	0 64 0 60	
134d	Conservancy of rivers „	1st half 2nd „	„ „	„ „	0 01 „	„ „	„ „	„ „	„ „	0 01 0 01	„ „	„ „	
135d	Repairs of stations and buildings „	1st half 2nd „	0 15 0 21	0 14 0 17	0 34 0 33	0 13 0 15	0 14 0 14	0 15 0 21	0 07 0 06	0 25 0 23	0 17 0 23	0 35 0 30	
136d	Other charges (net) „	1st half 2nd „	0 06 0 11	0 00 0 11	0 15 0 17	0 09 0 10	0 08 0 10	0 31 0 48	0 10 0 08	0 18 0 15	0 14 0 15	0 17 0 24	
137d	Total maintenance, &c. „	1st half 2nd „	0 91 1 23	1 36 1 57	2 56 1 90	0 91 0 91	1 25 1 10	1 67 2 73	1 49 1 36	1 53 1 36	1 31 1 52	4 08 3 69	

DIX 18—continued.

system during each half-year of 1906—contd.

do not prepare these statistics.

34"											2' 6"				GAUGE.		Serial number.
12 (a) & (b)	14 (a) to (d)	15 (a)	3 (b) & (c)	8 (c)	18 (a) to (c)	2 (g) to (m)	20 (a) & (b)	21 (a) to (f)	22 (a) to (j)	23 (a)	1 (b)	30 (a)	9 (h) & (i)	1 (e)	Number.	Calendar year 1906 by half-years.	
Bengal and North-Western.	Bhuvanagar-Gondal-Jumnagar-Porbandar.	Burma	Eastern Bengal.	Hyderabad-Godavari Valley.	Jodhpur-Bikaner	Rajputana-Malwa.	Rohilkhand and Kumaon.	South Indian.	South ern Maharashtra.	Udampur-Chitor	Jubbulpore-Gondal extension.	Kalka-Simla.	Khushalgarh-Kohat-Thal and Nowshera-Dargai.	Raipur-Igham-tari.			
80.25 95.15	49.55 57.81	142.30 113.10	107.81 117.42	127.09 118.63	21.31 22.31	90.59 94.07	57.61 68.00	169.58 163.86	78.49 77.17	79.83 37.16	105.49 91.92	247.64 257.87	153.24 126.46	7.00 7.01	1st half 2nd "		131a
328.42 368.02	247.85 207.62	377.21 488.41	601.27 335.08	729.70 370.69	171.54 427.00	357.51 369.64	147.61 1.8.71	352.92 268.00	272.81 312.74	132.86 271.91	123.11 126.51	207.60 204.41	231.61 162.95	111.50 92.99	1st half 2nd "		132a
111.99 143.03	5.75 7.65	206.13 128.00	77.11 217.43	23.65 33.49	4.13 2.36	68.16 80.02	31.39 56.09	350.98 187.73	46.04 51.22	0.95 4.28	8.11 12.90	37.45 718.57	98.78 119.58	11.50 24.11	1st half 2nd "		133a
0.93 3.20	...	0.29 0.10	...	...	...	...	...	...	...	...	...	...	...	...	1st half 2nd "		134a
45.90 68.77	18.19 41.59	117.12 168.25	103.26 147.22	38.85 31.37	18.14 16.41	64.15 13.39	22.80 34.8	38.58 69.98	44.23 65.47	18.82 27.15	13.21 36.72	34.29 28.32	89.58 33.10	4.87 22.06	1st half 2nd "		135a
40.01 65.45	28.32 22.77	94.63 159.23	109.95 112.19	60.21 67.84	2.07 10.58	39.95 47.55	...	37.92 4.40	33.60 61.38	6.27 9.27	23.93 8.38	17.21 9.57	56.06 39.59	9.33 49.61	1st half 2nd "		136a
613.50 712.02	319.66 337.44	938.21 1,087.59	1,005.10 939.32	975.50 632.02	230.18 478.66	620.69 667.27	263.25 336.12	941.28 605.09	474.67 167.98	194.55 352.72	291.17 276.43	513.91 1,319.04	624.27 498.58	134.16 195.78	1st half 2nd "		137a
71.78 82.33	45.06 52.57	121.43 122.29	91.49 99.81	110.72 115.71	20.23 21.16	77.16 80.30	50.07 59.09	141.94 144.78	70.70 69.51	37.36 34.81	98.15 84.90	223.60 232.32	113.74 133.90	6.59 6.61	1st half 2nd "		131b
284.72 315.71	225.39 183.80	321.93 415.10	510.28 241.83	658.49 383.43	162.91 405.04	305.08 345.58	127.78 187.91	311.96 237.31	215.46 281.68	124.45 257.33	114.83 116.84	187.12 181.32	210.38 155.31	105.98 87.66	1st half 2nd "		132b
97.09 123.37	5.23 6.96	176.16 119.00	65.44 184.82	21.27 30.12	3.93 2.23	58.17 68.84	20.89 48.74	319.24 165.88	41.53 46.13	0.83 4.01	7.55 11.91	39.52 6.74	89.73 108.53	10.84 22.73	1st half 2nd "		133b
0.80 2.84	...	0.25 0.08	...	...	...	...	...	...	...	...	...	...	...	...	1st half 2nd "		134b
39.79 59.32	16.54 37.82	100.21 143.27	92.73 125.14	31.95 28.21	17.22 15.57	54.99 62.05	25.90 39.23	34.7 61.82	39.86 54.97	17.65 25.41	30.93 13.92	31.96 28.53	81.37 29.96	1.59 20.79	1st half 2nd "		135b
34.69 56.46	25.75 20.71	60.73 135.60	93.31 95.61	51.15 61.02	19.05 19.04	34.69 38.89	...	33.73 4.33	30.28 56.28	5.88 8.62	22.26 7.74	16.54 8.90	10.92 35.94	8.79 46.77	1st half 2nd "		136b
531.87 610.03	317.97 206.86	500.73 926.14	853.25 790.78	877.48 568.49	2.3.34 454.04	529.63 566.26	2.8.89 292.67	832.04 614.12	427.83 511.37	186.23 350.18	273.72 253.31	491.04 1,099.71	574.14 452.69	123.71 184.56	1st half 2nd "		137b
0.88 0.98	1.07 1.51	1.19 1.20	1.09 1.13	1.48 1.91	0.43 0.46	0.73 0.79	0.79 0.91	1.53 1.49	0.84 0.92	1.53 1.51	2.73 2.14	3.48 3.25	1.74 1.30	0.21 0.21	1st half 2nd "		131c
3.37 3.74	5.33 5.41	3.17 4.09	6.07 3.24	8.80 5.59	3.45 8.94	2.89 3.11	2.01 2.14	3.37 2.44	2.94 3.71	5.11 11.07	3.19 2.95	2.91 2.60	2.55 1.63	3.30 2.77	1st half 2nd "		132c
1.15 1.46	0.13 0.20	1.73 1.07	0.78 2.10	0.29 0.51	0.08 0.05	0.55 0.67	0.47 0.76	3.35 1.70	0.50 0.61	0.04 0.17	0.21 0.31	0.52 9.13	1.09 1.15	0.31 0.72	1st half 2nd "		133c
0.01 0.04	...	...	0.01 ...	...	...	...	...	...	...	...	...	...	...	...	1st half 2nd "		134c
0.48 0.70	0.39 1.08	0.19 1.11	1.10 1.42	0.47 0.17	0.26 0.34	0.52 0.02	0.41 0.47	0.37 0.63	0.48 0.78	0.72 1.09	0.56 0.85	0.18 0.36	0.98 0.81	0.11 0.66	1st half 2nd "		135c
0.41 0.66	0.61 0.59	0.79 1.33	1.11 1.10	0.72 1.02	0.10 0.23	0.31 0.39	...	0.37 0.04	0.26 0.74	0.24 0.36	0.62 0.19	0.25 0.12	0.62 0.38	0.28 1.48	1st half 2nd "		136c
6.30 7.58	7.53 8.79	7.87 9.10	10.15 9.00	11.76 9.53	4.72 10.02	5.60 5.58	3.61 4.53	8.99 6.30	5.12 6.79	7.64 11.20	7.61 6.44	7.64 15.49	6.98 4.77	8.99 5.84	1st half 2nd "		137c
0.24 0.27	0.36 0.54	0.35 0.35	0.35 0.85	0.47 0.64	0.13 0.14	0.19 0.22	0.24 0.40	0.50 0.40	0.28 0.32	0.43 0.49	0.86 0.66	2.51 2.37	1.88 1.42	0.13 0.17	1st half 2nd "		131d
0.03 1.03	1.82 1.93	0.92 1.19	1.98 1.00	2.78 1.86	1.00 2.84	0.76 0.87	0.62 0.53	1.10 0.30	0.96 1.29	1.43 3.54	1.00 0.91	2.11 1.87	2.76 1.77	2.13 2.20	1st half 2nd "		132d
0.22 0.40	0.64 0.07	0.50 0.31	0.25 0.65	0.09 0.17	0.03 0.02	0.14 0.19	0.15 0.56	1.19 0.56	0.16 0.21	0.01 0.06	0.67 0.09	0.38 6.59	1.15 1.24	0.22 0.57	1st half 2nd "		133d
0.01 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1st half 2nd "		134d
0.13 0.19	0.13 0.39	0.28 0.41	0.56 0.43	0.15 0.16	0.10 0.11	0.14 0.17	0.13 0.11	0.12 0.21	0.15 0.27	0.20 0.84	0.27 0.27	0.35 0.26	1.97 0.35	0.09 0.52	1st half 2nd "		135d
0.11 0.18	0.21 0.21	0.23 0.29	0.26 0.38	0.22 0.34	0.12 0.07	0.09 0.10	...	0.12 0.05	0.12 0.25	0.06 0.13	0.19 0.16	0.17 0.09	0.68 0.41	0.18 1.17	1st half 2nd "		136d
1.73 2.08	2.57 3.14	2.28 2.65	3.30 2.76	3.71 3.17	1.87 3.18	1.39 1.55	1.12 1.12	2.83 2.07	1.67 2.34	2.18 4.54	2.79 1.99	5.52 11.18	7.57 5.19	2.56 4.63	1st half 2nd "		137d

APPEN

Analysis of working of each railway

NOTE.—Railways not shown

Serial number.	PARTICULARS.	GAUGE. Number Calen- dar year 1906 by half- years.	5' 6"										11 (a) Assam- Bengal.
			1 (a)	2 (a) to (f)	3 (a)	4 (c) to (d)	5 (a) to (f)	6 (a) to (d)	8 (a) & (b)	9 (a) to (g)	10 (a) & (b)		
			Bengal- Nagpur.	Hem- bay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Penin- sula.	Madras.	Nizam's Guar- anteed State.	North West- ern.	Oudh and Jhohil- khand.		
			TABLE B.—LOCOMOTIVE										
	Average price of { Coal . Rs. {	1st half	2 65	17 41	6 33	1 97	11 27	9 69	4 68	13 30	8 30	7 41	
	fuel per ton in	2nd "	2 65	16 46	6 50	1 97	11 40	11 09	4 71	13 80	8 51	7 41	
	terms of . . . { Wood . " {	1st half	...	..	..	...	...	...	...	...	...	...
		2nd "	...	..	..	...	...	...	...	...	...	...
	PER TOTAL TRAIN-MILE.												
138a	General superintendence (including office expen- ses) Annas {	1st half	1 05	1 03	0 55	0 74	0 64	0 65	0 75	0 56	0 64	0 98	
		2nd "	1 11	1 08	0 54	0 77	0 71	0 68	0 82	0 55	0 64	0 91	
139a	Running expenses {	1st half	2 43	3 04	1 30	2 13	2 70	2 01	1 78	1 54	1 13	1 68	
		2nd "	2 50	3 04	2 07	2 25	2 92	2 05	1 76	1 45	1 15	1 64	
140a	Fuel {	1st half	1 27	7 05	2 70	0 82	4 67	4 13	1 90	5 32	3 70	2 48	
		2nd "	1 24	6 31	3 02	0 94	4 08	4 70	1 87	5 33	3 60	3 01	
141a	Water {	1st half	0 17	0 31	0 18	0 11	0 34	0 31	0 27	0 25	0 15	0 22	
		2nd "	0 14	0 46	0 19	0 13	0 35	0 33	0 25	0 27	0 18	0 23	
142a	Oil, tallow and other stores {	1st half	0 29	0 55	0 40	0 33	0 46	0 37	0 35	0 28	0 26	0 25	
		2nd "	0 32	0 49	0 41	0 40	0 49	0 45	0 38	0 26	0 33	0 28	
143a	Maintenance and renewal of locomotives {	1st half	3 14	4 85	3 59	2 46	3 16	3 45	2 02	4 09	1 63	1 71	
		2nd "	2 85	4 14	2 13	2 41	3 55	4 22	2 16	3 23	1 47	2 15	
143A (a)	Maintenance and renewal of machinery, tools and plant {	1st half	0 16	0 37	0 11	0 23	0 23	0 14	0 05	0 31	0 13	0 02	
		2nd "	0 15	0 71	0 41	0 14	0 26	0 23	0 05	0 47	0 35	0 04	
144a	Other charges (net) . . . {	1st half	1 74	1 32	0 32	0 97	1 53	2 10	0 48	2 12	1 71	1 06	
		2nd "	1 61	1 07	0 49	0 90	0 93	2 23	0 51	1 31	1 38	1 07	
145a	Total locomotive expen- ses {	1st half	10 25	19 02	10 65	7 87	13 19	13 19	7 60	14 47	9 60	8 40	
		2nd "	9 92	17 30	9 26	7 94	13 43	11 89	7 81	13 07	9 10	9 33	
	Fuel consumed in { Coal (Kharur- terms of . . . baroo) lbs. {	1st half	66 93	56 67	59 68	69 39	58 00	59 65	56 81	55 98	57 59	45 05	
		2nd "	65 52	58 74	62 12	67 99	57 05	59 36	55 61	59 12	55 37	51 66	
		1st half	...	...	...	...	...	...	...	...	...	...
		2nd "	...	...	...	...	...	...	...	...	...	...
	PER ENGINE-MILE.												
138b	General superintendence (including office expen- ses) Annas {	1st half	0 87	0 85	0 37	0 55	0 46	0 57	0 64	0 18	0 54	0 77	
		2nd "	0 92	0 91	0 37	0 57	0 63	0 58	0 71	0 47	0 54	0 68	
139b	Running expenses {	1st half	2 02	2 51	1 30	1 58	2 25	1 60	1 53	1 33	0 96	1 32	
		2nd "	2 08	2 53	1 41	1 67	2 55	1 75	1 50	1 25	0 98	1 21	
140b	Fuel {	1st half	1 05	5 81	1 85	0 66	4 07	3 48	1 63	4 60	3 21	1 95	
		2nd "	1 02	5 76	2 05	0 69	4 10	4 02	1 53	4 75	3 06	2 24	
141b	Water {	1st half	0 14	0 42	0 12	0 09	0 30	0 27	0 33	0 22	0 12	0 17	
		2nd "	0 11	0 39	0 13	0 10	0 29	0 29	0 22	0 23	0 15	0 17	
142b	Oil, tallow and other stores {	1st half	0 24	0 45	0 27	0 25	0 39	0 31	0 30	0 24	0 30	0 20	
		2nd "	0 26	0 41	0 28	0 29	0 43	0 38	0 31	0 23	0 28	0 21	
143b	Maintenance and renewal of locomotives {	1st half	2 62	3 20	2 46	1 84	2 75	2 91	1 72	3 54	1 43	1 35	
		End "	2 36	3 46	1 45	1 78	3 11	3 61	1 84	2 77	1 24	1 60	
143A (b)	Maintenance and renewal of machinery, tools and plant {	1st half	0 15	0 56	0 28	0 17	0 20	0 12	0 04	0 25	0 16	0 02	
		2nd "	0 13	0 59	0 28	0 10	0 23	0 20	0 04	0 40	0 30	0 03	
144b	Other charges (net) . . . {	1st half	1 43	1 00	0 32	0 72	1 21	1 77	0 42	1 83	1 45	0 84	
		2nd "	1 34	0 59	0 33	0 87	0 86	1 31	0 44	1 12	1 17	0 80	
145b	Total locomotive expen- ses {	1st half	8 52	15 68	6 67	5 86	11 83	11 12	6 51	12 50	8 17	6 02	
		2nd "	8 22	14 94	6 30	5 57	12 20	12 74	6 65	11 22	7 72	6 04	
	Fuel consumed in { Coal (Kharur- terms of . . . baroo) lbs. {	1st half	55 68	46 73	40 83	51 86	50 48	50 28	48 58	48 38	48 69	35 47	
		2nd "	54 16	49 02	43 24	50 27	49 95	50 80	47 31	48 17	45 27	40 64	
		1st half	...	...	...	...	...	...	...	...	...	...
		2nd "	...	...	...	...	...	...	...	...	...	...

DIX 18—continued.

system during each half-year of 1906—contd.

do not prepare these statistics.

3' 3 1/2"											2' 6"				GAUGE.		Serial number.
12 (a) & (b)	14 (a) to (d)	15 (a)	3 (b) and (c)	8 (c)	18 (a) to (c)	2 (g) to (m)	20 (a) & (b).	21 (a) to (f)	22 (a) to (j)	23 (a)	1 (h)	30 (a)	9 (h) & (i)	1 (o)	Number.		
Bengal and North-Western.	Bhuvanagar-Gondal-Jam-gad-Forbandar.	Burma.	Eastern Bengal.	Hyderabad-Godavari Valley.	Jodhpur-Bikaner.	Rajputana-Malwa.	Robil-kund and Kumaon.	South Indian.	Southern Maharastra.	Udai-pur-Chitor.	Jubbulpore-Gondia extension.	Kalka-Simla.	Khushalnagar-Kohat-Thal and Nowshera-Dargai.	Paipur-Dhamtari.	Calendar year 1906 by half-years.		
EXPENSES.																	
6.86 6.71	15.13 15.41	10.98 11.70	6.78 8.53	4.77 4.87	14.58 14.80	14.38 16.48	...	12.81 13.21	10.13 10.31	18.65 18.71	3.35 3.62	19.20 18.38	13.29 13.47	2.57 2.61	1st half 2nd "	}	
...	...	...	...	...	...	...	7.03 5.32	...	...	...	...	...	...	...	1st half 2nd "	
0.42 0.43	0.74 0.99	0.83 0.82	0.61 0.57	0.96 1.15	0.32 0.34	0.58 0.73	0.79 0.81	0.60 0.59	0.65 0.75	1.66 1.68	1.19 0.90	1.45 1.39	0.58 0.74	0.58 0.63	1st half 2nd "		}
0.74 0.77	1.20 1.30	2.68 2.56	1.09 1.21	1.53 1.54	0.69 0.79	1.68 1.76	0.75 0.78	1.65 1.63	1.62 1.69	0.72 0.75	1.20 1.14	2.53 2.49	1.13 0.99	1.00 0.97	1st half 2nd "	}	
1.67 1.92	3.49 3.03	3.53 3.50	1.49 2.41	1.29 1.30	4.48 4.17	3.88 4.00	3.53 3.48	2.93 3.08	2.69 2.70	5.22 4.71	1.40 1.47	2.04 10.92	1.80 1.69	0.48 0.43	1st half 2nd "		
0.15 0.15	0.13 0.17	0.32 0.32	0.14 0.16	0.19 0.21	0.45 0.42	0.23 0.27	0.18 0.15	0.18 0.14	0.22 0.22	0.30 0.26	0.33 0.34	1.17 1.33	0.49 0.43	0.28 0.30	1st half 2nd "		}
0.29 0.18	0.24 0.31	0.35 0.32	0.23 0.28	0.19 0.22	0.32 0.35	0.30 0.28	0.25 0.22	0.25 0.28	0.16 0.17	0.30 0.31	0.21 0.20	0.47 0.47	0.36 0.36	0.26 0.32	1st half 2nd "	}	
0.99 1.04	0.86 1.29	1.61 2.33	3.43 1.40	0.88 1.76	1.30 1.34	2.66 2.40	1.44 1.40	4.64 3.44	2.01 2.71	1.49 1.55	0.46 0.91	2.69 2.85	1.27 0.75	1.63 0.39	1st half 2nd "		
0.04 0.05	0.08 0.07	0.17 0.15	0.22 0.25	0.04 0.05	0.11 0.15	0.36 0.41	0.17 0.17	0.10 0.14	0.21 0.21	0.29 0.32	0.07 0.03	0.02 0.02	0.11 0.03	...	1st half 2nd "		}
0.69 0.76	0.52 0.5	0.69 1.08	1.54 0.35	0.78 0.88	0.81 1.25	0.73 0.62	0.69 0.47	0.14 0.30	1.15 1.11	...	3.01 2.68	0.07 0.33	0.39 0.31	1.31 1.26	1st half 2nd "	}	
5.10 5.30	7.26 7.34	10.18 11.68	9.15 6.63	5.86 6.71	8.18 8.84	10.47 10.37	7.86 7.21	10.49 9.60	8.62 9.39	9.87 9.83	8.42 7.64	17.44 19.80	6.13 5.26	5.00 4.26	1st half 2nd "		
41.24 49.13	32.91 27.48	45.09 41.82	39.01 39.65	37.79 37.34	43.05 39.47	37.76 36.91	...	31.92 32.60	35.93 36.69	35.23 31.81	18.36 16.83	72.36 81.0	18.91 16.64	26.28 25.89	1st half 2nd "		}
...	...	...	...	...	...	...	115.77 114.09	...	...	...	...	...	...	...	1st half 2nd "	
0.35 0.35	0.66 0.91	0.69 0.69	0.48 0.44	0.86 1.03	0.30 0.31	0.10 0.55	0.61 0.65	0.55 0.54	0.58 0.67	1.55 1.58	0.99 0.75	1.31 1.18	0.48 0.63	0.56 0.60	1st half 2nd "	}	
0.60 0.63	1.67 1.20	2.20 2.13	0.85 0.94	1.37 1.38	0.65 0.73	1.15 1.52	0.69 0.63	1.50 1.49	1.44 1.51	0.67 0.69	1.00 0.96	2.30 2.10	0.93 0.83	0.96 0.92	1st half 2nd "		}
1.51 1.58	3.11 2.79	2.91 2.92	1.47 1.87	1.16 1.16	4.18 3.87	3.35 3.45	2.77 2.56	2.66 2.81	2.31 2.41	4.86 4.44	1.15 1.22	8.20 9.41	1.47 1.35	0.46 0.47	1st half 2nd "		
0.12 0.12	0.12 0.15	0.06 0.26	0.11 0.13	0.18 0.18	0.42 0.39	0.24 0.23	0.14 0.13	0.16 0.13	0.19 0.20	0.08 0.24	0.31 0.17	1.06 1.13	0.41 0.36	0.27 0.23	1st half 2nd "	}	
0.16 0.15	0.21 0.29	0.29 0.26	0.18 0.21	0.17 0.20	0.31 0.36	0.26 0.24	0.19 0.20	0.23 0.25	0.14 0.15	0.28 0.23	0.18 0.16	0.43 0.40	0.30 0.31	0.25 0.21	1st half 2nd "		}
0.81 0.85	0.77 1.19	1.32 1.94	2.66 1.09	0.79 1.21	1.21 1.24	2.30 2.07	1.13 1.14	4.22 3.14	1.79 2.41	1.40 1.45	0.79 0.76	2.44 2.41	1.04 0.63	1.62 0.37	1st half 2nd "		
0.04 0.04	0.07 0.08	0.14 0.13	0.17 0.19	0.04 0.05	0.10 0.14	0.32 0.36	0.14 0.13	0.09 0.14	0.19 0.19	0.19 0.49	0.05 0.01	0.02 0.02	0.09 0.06	...	1st half 2nd "	}	
0.56 0.63	0.46 0.17	0.56 0.90	1.21 0.27	0.70 0.78	0.75 1.15	0.63 0.53	0.54 0.37	0.13 0.27	1.03 1.02	...	2.48 2.22	0.06 0.33	0.32 0.26	1.96 1.20	1st half 2nd "		}
4.18 4.35	6.47 6.76	8.37 9.28	7.15 5.14	5.27 5.99	7.92 8.20	9.05 8.95	6.12 5.81	9.54 8.77	7.67 8.56	9.23 9.18	6.95 6.35	15.82 16.80	5.04 4.43	5.38 4.05	1st half 2nd "		
33.81 32.91	28.78 26.30	37.03 34.58	30.47 30.78	33.99 33.30	40.17 36.50	32.62 31.96	...	29.04 29.75	31.96 32.71	32.92 29.86	48.21 47.23	65.66 69.09	15.54 14.02	25.24 24.65	1st half 2nd "	}	
...	...	...	...	...	...	...	90.90 81.91	...	...	...	...	...	...	...	1st half 2nd "	

Analysis of working of each railway

NOTE.—Railways not shown

Serial number.	PARTICULARS.	GAUGE. Number Calendar year 1906 by half- years	5'6"									
			1 (a)	2 (a) to (j)	3 (a)	4 (a) to (d)	5 (a) to (j)	6 (a) to (d)	8 (a) & (h)	9 (a) to (g)	10 (a) & (b)	11 (a)
			Bengal Nagpur	Bom- bay, Baroda and Central India.	East-ern Bengal	East Indian.	Great Indian Peninsula.	Madras.	Nizam's Guaran- teed State.	North Western.	Oudh and Rohil- khand.	Assam- Bengal.
	PER 1,000 GROSS TON-MILES.								TABLE B.—LOCOMOTIVE			
138c	General superintendence (includ- ing office expenses) . . . Rs.	1st half 2nd "	0 16 0 19	0 15 0 18	0 11 0 11	0 09 0 10	0 11 0 13	0 13 0 13	0 13 0 14	0 10 0 10	0 13 0 13	0 31 0 26
139c	Running expenses . . . "	1st half 2nd "	0 38 0 43	0 45 0 41	0 37 0 40	0 27 0 29	0 47 0 54	0 37 0 40	0 36 0 30	0 28 0 26	0 23 0 24	0 53 0 46
140c	Fuel "	1st half 2nd "	0 29 0 22	1 05 1 12	0 53 0 58	0 11 0 12	0 81 0 87	0 76 0 82	0 32 0 32	0 96 0 98	0 78 0 76	0 79 0 86
141c	Water "	1st half 2nd "	0 03 0 02	0 05 0 08	0 03 0 03	0 02 0 01	0 06 0 06	0 06 0 07	0 05 0 05	0 04 0 05	0 03 0 04	0 07 0 07
142c	Oil, tallow and other stores . . "	1st half 2nd "	0 05 0 15	6 08 6 08	0 08 0 08	0 04 0 05	0 08 0 09	0 07 0 09	0 06 0 07	0 05 0 05	0 07 0 07	0 08 0 08
143c	Maintenance and renewal of locomotives "	1st half 2nd "	0 19 0 18	0 72 0 67	0 70 0 11	0 32 0 31	0 35 0 36	0 64 0 83	0 34 0 37	0 74 0 37	0 35 0 31	0 55 0 61
143 A(g)	Maintenance and renewal of machinery, tools and plant . . "	1st half 2nd "	0 02 0 02	0 10 0 11	0 08 0 08	0 03 0 02	0 04 0 05	0 03 0 05	0 01 0 01	0 05 0 08	0 04 0 07	0 02 0 02
144c	Other charges (net) "	1st half 2nd "	0 28 0 28	0 20 0 18	0 07 0 09	0 13 0 12	0 24 0 18	0 29 0 14	0 08 0 08	0 38 0 25	0 35 0 29	0 34 0 31
145c	Total locomotive expenses . . "	1st half 2nd "	1 61 1 69	2 83 2 81	1 97 1 78	1 01 1 02	2 36 2 58	2 45 2 53	1 29 1 34	2 60 2 32	1 98 1 91	2 69 2 67
	Fuel consumed { Coal (Kurr. lbs. in terms of { hurdawee). "	1st half 2nd "	158 51 177 98	135 14 152 39	187 41 197 14	14 48 15 36	161 08 168 74	176 90 186 68	154 31 152 56	161 05 159 27	188 61 179 69	230 51 259 08
	{ Wood "	1st half 2nd "	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...
	PER TOTAL TRAIN-MILE.								TABLE C.—CARRIAGE AND			
146a	General superintendence (includ- ing office expenses) . . . Annas	1st half 2nd "	0 21 0 25	0 39 0 49	0 26 0 27	0 29 0 22	0 20 0 24	0 22 0 23	0 13 0 20	0 08 0 08	0 25 0 30	0 32 0 29
147a	Repairs and renewals of coach- ing vehicles "	1st half 2nd "	1 31 1 23	2 70 1 83	1 60 1 22	1 05 0 93	1 05 1 14	1 19 1 05	0 61 0 67	0 75 0 75	0 79 0 54	0 75 0 96
148a	Repairs and renewals of goods vehicles "	1st half 2nd "	0 94 0 89	2 49 1 79	1 15 1 02	2 29 1 87	1 15 1 25	1 64 1 70	1 26 1 17	0 91 0 78	0 33 0 27	1 11 1 32
148A (a)	Repairs and renewals of ma- chinery, tools and plant . . . "	1st half 2nd "	0 09 0 05	0 22 0 24	0 03 0 03	0 07 0 10	0 11 0 11	0 10 0 11	0 01 0 02	0 06 0 04	0 27 0 11	0 03 0 04
149a	Cleaning and oiling "	1st half 2nd "	0 16 0 51	0 51 0 50	0 27 0 29	0 24 0 25	0 47 0 49	0 37 0 38	0 31 0 32	0 33 0 34	0 34 0 33	0 26 0 28
150a	Other charges (net) "	1st half 2nd "	0 06 0 06	0 03 0 04	0 03 0 01	0 02 0 03	0 02 0 02	0 38 0 42	... ...	0 02 0 02	0 06 0 01	0 01 0 01
151a	Total carriage and wagon expenses "	1st half 2nd "	3 13 2 99	6 14 4 99	3 24 2 74	3 87 3 10	3 00 3 25	3 90 4 52	2 38 2 38	2 15 2 01	2 04 1 56	2 48 2 90
	PER 1,000 VEHICLE-MILES RUN BY HOME VEHICLES.											
146b	General superintendence (includ- ing office expenses) . . . Rs.	1st half 2nd "	0 17 0 53	0 91 0 79	0 90 0 95	0 44 0 48	0 64 0 84	0 64 0 72	0 46 0 44	0 25 0 25	0 77 1 03	1 08 0 99
147b	Repairs and renewals of coach- ing vehicles calculated on coach- ing vehicle mileage "	1st half 2nd "	13 58 11 05	15 67 11 20	11 00 9 40	9 00 7 52	10 67 10 20	10 19 13 96	7 05 6 17	6 76 6 36	6 91 4 55	5 89 7 37
148b	Repairs and renewals of goods vehicles calculated on goods vehicle mileage "	1st half 2nd "	2 74 2 44	9 48 7 64	8 05 6 45	6 99 5 62	5 23 7 05	7 04 8 81	4 09 3 41	4 43 3 78	1 53 1 60	6 84 7 73
148A (b)	Repairs and renewals of ma- chinery, tools and plant "	1st half 2nd "	0 17 0 10	0 32 0 60	0 11 0 11	0 16 0 22	0 35 0 38	0 28 0 45	0 03 0 04	0 16 0 11	0 82 0 37	0 08 0 16
149b	Cleaning and oiling "	1st half 2nd "	0 09 1 10	1 17 1 27	0 92 1 01	0 53 0 55	1 48 1 69	1 05 1 28	0 80 0 72	1 03 1 06	1 03 1 12	0 89 0 94
150b	Other charges (net) "	1st half 2nd "	0 12 0 13	0 06 0 09	0 11 0 04	0 06 0 07	0 06 0 08	1 10 1 35	... ...	0 05 0 05	0 20 0 04	0 03 0 08
151b	Total carriage and wagon expenses "	1st half 2nd "	6 28 6 36	14 26 12 05	11 57 9 87	8 70 14 46	9 43 11 26	11 18 14 58	6 02 5 28	6 20 6 20	6 24 5 37	8 51 9 74

DIX 18—continued.

system during each half-year of 1906—contd.

do not prepare these statistics.

3' 3 1/2"											2' 6"				GAUGE.		Serial number.
12 (a) (b)	14 (a) to (d)	15 (a)	3 (b) & (c)	8 (c)	18 (a) to (c)	2 (g) to (m)	20 (a) & (b)	21 (a) to (f)	22 (a) to (j)	23 (a)	1 (b)	30 (a)	9 (A) & (i)	1 (e)	Number.		
Bengal and North- West- ern.	Bhuv- nagar- Gondal- Junagad- Por- bandar.	Burma.	Eastern Bengal.	Hydara- bad-God- daviari Valley.	Jodhpur- Bikaner.	Rajput- ana- Malwa.	Rohil- khand and Kumaon.	South Indian.	South- ern Mahar- atta.	Udaipur- Chitor.	Jabal- pur- Gondia extension.	Kalka- Simla.	Khusha- gurih- Kohat- Thal and Nowshera Dargai.	Rajpur- Dhotari.	Calendar year 1906 by half- years.		
EXPENSES—contd.																	
0.12	0.25	0.24	0.20	0.30	0.10	0.15	0.22	0.20	0.21	0.47	0.37	1.05	0.63	0.37	1st half	} 138c	
0.12	0.35	0.24	0.17	0.38	0.11	0.18	0.20	0.19	0.25	0.54	0.28	1.00	0.81	0.50	2nd "		
0.21	0.41	0.77	0.36	0.48	0.20	0.44	0.21	0.51	0.53	0.20	0.37	1.83	1.22	0.61	1st half	} 139c	
0.21	0.47	0.71	0.37	0.52	0.25	0.49	0.20	0.53	0.58	0.23	0.35	1.80	1.07	0.77	2nd "		
0.52	1.19	1.03	0.61	0.41	1.30	1.02	1.10	0.95	0.85	1.46	0.44	6.53	1.95	0.31	1st half	} 140c	
0.54	1.08	1.02	0.74	0.43	1.32	1.11	0.79	1.01	0.93	1.51	0.45	7.88	1.71	0.39	2nd "		
0.04	0.05	0.10	0.04	0.06	0.12	0.07	0.06	0.06	0.07	0.09	0.12	0.94	0.54	0.18	1st half	} 141c	
0.04	0.06	0.09	0.05	0.07	0.08	0.07	0.04	0.05	0.08	0.09	0.11	0.96	0.47	0.23	2nd "		
0.06	0.08	0.10	0.08	0.06	0.10	0.08	0.08	0.08	0.05	0.08	0.07	0.34	0.40	0.17	1st half	} 142c	
0.05	0.11	0.09	0.09	0.07	0.12	0.08	0.06	0.09	0.06	0.09	0.07	0.34	0.40	0.17	2nd "		
0.27	0.29	0.46	1.12	0.28	0.37	0.71	0.45	1.52	0.66	0.43	0.30	1.94	1.38	1.08	1st half	} 143c	
0.29	0.16	0.68	0.43	0.16	0.43	0.67	0.35	1.13	0.94	0.56	0.28	2.06	0.81	0.31	2nd "		
0.01	0.03	0.05	0.07	0.01	0.03	0.10	0.05	0.03	0.07	0.05	0.02	0.02	0.11	...	1st half	} 143	
0.01	0.03	0.05	0.08	0.02	0.05	0.12	0.04	0.05	0.07	0.16	...	0.01	0.08	...	2nd "		
0.19	0.18	0.20	0.50	0.25	0.21	0.19	0.22	0.04	0.38	...	0.95	0.05	0.42	0.84	1st half	} 144c	
0.21	0.06	0.32	0.11	0.29	0.10	0.17	0.12	0.10	0.59	...	0.82	0.28	0.33	1.01	2nd "		
1.42	2.48	2.95	2.98	1.85	2.47	2.76	2.42	3.42	2.82	2.78	2.64	12.60	6.65	3.59	1st half	} 145c	
1.47	2.62	3.23	2.04	2.21	2.81	2.58	1.80	3.15	3.31	3.12	2.35	14.33	5.71	3.98	2nd "		
183.48	176.51	208.61	202.99	190.85	200.32	159.10	...	166.76	187.79	158.41	327.81	836.64	328.26	260.91	1st half	} 146c	
128.51	157.05	195.16	191.99	199.00	200.23	161.25	...	170.94	202.37	162.92	221.57	913.15	289.34	329.09	2nd "		
...	575.25	1st half	} 147c	
...	...	...	...	...	...	...	451.80	...	...	...	...	...	...	...	2nd "
WAGON EXPENSES.																	
0.15	0.21	0.24	0.35	0.14	0.11	0.22	0.34	0.20	0.22	0.39	0.23	0.48	0.07	0.14	1st half	} 146a	
0.16	0.30	0.21	0.31	0.17	0.11	0.23	0.33	0.19	0.21	0.40	0.16	0.46	0.07	0.16	2nd "		
0.14	0.82	0.79	1.03	0.39	0.43	1.27	0.63	0.63	0.89	0.41	0.85	0.55	0.24	0.55	1st half	} 147a	
0.38	1.55	0.81	1.03	0.35	0.46	1.05	0.93	0.72	0.91	0.37	0.42	0.78	0.17	0.23	2nd "		
0.45	0.38	1.37	3.38	0.27	0.31	1.49	0.61	0.94	0.77	0.17	0.41	0.06	0.19	0.09	1st half	} 148a	
0.39	0.32	1.15	0.73	0.44	0.33	1.04	0.71	1.13	0.75	0.26	0.31	0.95	0.20	0.16	2nd "		
0.03	0.04	0.05	0.03	0.06	0.06	0.12	0.02	0.03	0.04	0.06	0.03	...	0.01	...	1st half	} 148	
0.03	0.03	0.07	0.05	0.02	0.09	0.14	0.03	0.05	0.04	0.07	0.03	...	...	...	2nd "
0.30	0.21	0.26	0.30	0.16	0.18	0.27	0.34	0.31	0.16	0.50	0.38	0.31	0.41	0.26	1st half	} 149a	
0.28	0.24	0.25	0.36	0.20	0.19	0.29	0.38	0.31	0.18	0.48	0.37	0.30	0.31	0.21	2nd "		
0.02	0.03	0.02	0.05	...	0.01	0.01	0.06	0.07	0.01	...	0.06	...	0.03	0.10	1st half	} 150a	
0.03	...	0.02	0.07	...	...	0.02	...	0.01	0.04	...	0.05	...	0.05	...	2nd "
1.39	1.67	2.73	5.14	0.96	1.10	3.38	1.98	2.03	2.69	1.53	1.49	1.40	1.25	1.14	1st half	} 151a	
1.47	2.14	2.55	2.55	1.18	1.18	2.77	2.41	2.39	2.16	1.38	1.34	2.19	0.81	0.81	2nd "		
0.34	0.55	0.65	1.02	0.46	0.30	0.50	0.73	0.60	0.62	0.98	0.56	3.45	0.41	0.50	1st half	} 146b	
0.38	0.77	0.68	1.00	0.62	0.31	0.55	0.75	0.61	0.70	1.05	0.40	3.45	0.45	0.76	2nd "		
2.56	4.35	5.97	6.54	4.42	3.00	8.87	4.13	3.76	7.96	1.57	1.95	3.90	3.28	6.61	1st half	} 147b	
2.23	4.00	5.86	6.85	3.25	2.97	6.54	5.99	4.43	7.50	1.55	2.96	5.77	2.17	3.74	2nd "		
1.68	1.90	5.71	18.28	1.28	1.40	5.11	2.16	5.65	3.26	1.11	1.94	0.46	6.05	0.50	1st half	} 148b	
2.53	0.84	5.66	4.51	2.60	1.75	4.09	2.81	6.88	3.50	1.95	1.36	7.04	2.80	1.22	2nd "		
0.07	0.11	0.14	0.07	...	0.14	0.20	0.05	0.10	0.11	0.16	0.06	...	0.07	...	1st half	} 148	
0.09	0.09	0.20	0.15	0.07	0.25	0.83	0.07	0.15	0.12	0.17	0.05	...	0.01	...	2nd "		
0.66	0.54	0.69	0.87	0.54	0.48	0.64	0.79	0.92	0.47	1.27	0.83	2.18	2.63	0.09	1st half	} 149b	
0.70	0.63	0.70	1.16	0.71	0.55	0.71	0.85	0.95	0.54	1.28	0.89	2.24	2.16	1.05	2nd "		
0.04	0.02	0.04	0.15	0.01	0.03	0.03	0.13	0.20	0.02	0.01	0.16	...	0.18	0.35	1st half	} 150b	
0.07	...	0.04	0.23	0.01	0.01	0.03	0.01	0.03	0.13	...	0.13	...	0.31	0.03	2nd "		
8.10	4.32	7.33	14.98	3.25	2.97	7.83	4.58	6.13	5.98	8.84	3.67	9.99	8.04	4.23	1st half	} 151b	
8.64	6.93	6.99	8.19	4.27	8.44	6.00	5.52	7.37	6.43	4.19	3.28	18.50	5.42	4.00	2nd "		

Analysis of working of each railway 7

NOTE.—Railways not shown

Serial number.	PARTICULARS.	GAUGE.										
		Number	5' 6"									
			1 (a)	2 (a) to (f)	3 (a)	4 (a) to (d)	5 (a) to (f)	6 (a) to (d)	8 (a) & (b)	9 (a) to (g)	10 (a) & (b)	11 (a)
		Calendar year 1906 by half-years.	Bombay, Baroda and Central India.	Bombay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula.	Madras.	Nizam's Guaranteed State.	North Western.	Oudh and Rohilkhand.	Azamgarh.
TABLE D—TRAFFIC												
PER TOTAL TRAIN-MILE.												
152a	General superintendence (including office expenses)	1st half	0.92	0.91	1.30	0.84	0.51	0.87	0.53	0.51	0.74	0.86
		2nd "	0.94	1.02	1.21	0.93	0.60	0.87	0.60	0.51	0.79	0.85
153a	Station staff	1st half	2.28	3.34	6.36	2.85	2.00	2.22	1.65	2.18	2.55	2.55
		2nd "	2.26	3.31	7.34	3.28	2.25	2.23	1.93	2.37	2.55	3.32
154a	Train staff	1st half	0.65	0.87	1.14	1.22	1.28	0.72	0.66	0.86	0.88	0.68
		2nd "	0.91	0.89	1.13	1.26	1.36	0.77	0.73	0.88	0.85	0.68
155a	Fuel, lighting, water and general stores	1st half	0.60	0.95	1.18	0.81	0.67	0.54	0.42	0.57	0.56	0.43
		2nd "	0.51	0.89	0.95	0.70	0.82	0.47	0.46	0.60	0.51	0.48
156a	Clothing	1st half	0.02	0.12	0.06	0.07	0.07	0.10	0.05	0.04	0.19	0.10
		2nd "	0.05	0.09	0.06	0.08	0.07	0.09	0.10	0.10	0.05	0.05
157a	Printing, stationery and tickets	1st half	0.19	0.55	0.36	0.31	0.23	0.68	0.28	0.17	0.14	0.25
		2nd "	0.19	0.59	0.38	0.36	0.32	0.49	0.15	0.18	0.34	0.25
158a	Charges for delivery and collection of goods, etc.	1st half	...	...	0.02	0.01	0.01	0.02	...	...	0.02	...
		2nd "	...	...	0.02	0.01	0.01	0.01	...	...	0.01	...
159a	Miscellaneous expenses	1st half	...	0.02	0.01	0.02	0.02	0.06	0.01	0.01	0.01	0.01
		2nd "	0.02	0.03	0.07	0.02	0.01	0.05	0.02	0.01	0.01	0.01
160a	Payments to other lines	1st half	1.07	0.14	...	0.08	0.08	0.05	0.30	0.04	0.20	...
		2nd "	1.05	0.13	...	0.07	0.07	0.06	0.41	0.03	0.27	...
161a	Other charges (net)	1st half	0.01	0.01	0.01	0.01	0.02	0.07	0.01	0.03	0.01	...
		2nd "	0.01	0.01	0.01	0.01	0.05	0.05	0.01	0.03	0.02	0.01
162a	Total traffic expenses	1st half	5.74	6.91	10.48	6.22	5.61	5.33	3.91	4.41	5.43	4.83
		2nd "	5.94	6.96	11.17	6.72	5.53	5.10	4.41	4.71	5.40	5.65
PER CENT. ON TRAFFIC EARNINGS.												
(Abstracts H and I of Revenue Accounts.)												
152b	General superintendence (including office expenses)	1st half	1.28	0.86	2.41	1.10	0.78	1.25	0.76	0.86	1.45	2.35
		2nd "	1.55	1.16	1.63	1.26	1.01	1.40	0.88	0.87	1.74	2.04
153b	Station staff	1st half	3.17	3.17	11.75	3.73	3.00	3.21	2.36	3.70	5.04	6.98
		2nd "	3.73	3.80	9.88	4.47	3.50	3.60	2.86	4.08	5.61	7.88
154b	Train staff	1st half	0.90	0.82	2.12	1.59	1.84	1.04	0.94	1.46	1.73	1.86
		2nd "	1.51	1.02	1.52	1.72	2.30	1.24	1.08	1.52	1.89	1.60
155b	Fuel, lighting, water and general stores	1st half	0.83	0.90	2.18	1.06	0.97	0.79	0.60	0.96	1.11	1.18
		2nd "	0.83	1.02	1.28	0.95	1.39	0.76	0.68	1.04	1.11	1.12
156b	Clothing	1st half	0.03	0.11	0.10	0.09	0.10	0.15	0.08	0.07	0.38	0.28
		2nd "	0.03	0.11	0.08	0.11	0.12	0.14	0.15	0.17	0.10	0.11
157b	Printing, stationery and tickets	1st half	0.26	0.52	0.67	0.41	0.34	0.98	0.40	0.29	0.29	0.69
		2nd "	0.32	0.67	0.51	0.49	0.54	0.79	0.23	0.31	0.75	0.59
158b	Charges for delivery and collection of goods, etc.	1st half	0.01	...	0.04	0.01	0.02	0.03	...	0.01	0.03	...
		2nd "	0.01	...	0.02	0.01	0.02	0.02	...	0.01	0.03	...
159b	Miscellaneous expenses	1st half	0.01	0.02	0.08	0.02	0.03	0.09	0.01	0.01	0.01	0.08
		2nd "	0.02	0.04	0.08	0.02	0.03	0.10	0.03	0.01	0.01	0.04
160b	Payments to other lines	1st half	1.49	0.14	...	0.10	0.11	0.07	0.43	0.07	0.39	...
		2nd "	1.74	0.15	...	0.10	0.12	0.09	0.61	0.08	0.60	...
161b	Other charges (net)	1st half	0.01	0.01	0.03	0.02	0.02	0.19	0.01	0.05	0.08	...
		2nd "	0.01	0.01	0.02	0.02	0.03	0.08	0.01	0.05	0.05	0.01
162b	Total traffic expenses	1st half	7.99	6.55	19.38	8.13	7.21	7.71	5.59	7.48	10.51	13.37
		2nd "	9.80	7.98	15.02	9.15	9.36	8.22	6.53	8.12	11.88	13.39
General superintendence per cent. on traffic earnings (including steamboat)												
		1st half	1.29	0.86	2.41	1.10	0.78	1.25	0.76	0.86	1.45	2.35
		2nd "	1.55	1.16	1.63	1.26	1.01	1.40	0.88	0.87	1.74	2.04

DIX 18—contd.

system during each half-year of 1906—contd.

o not prepare these statistics.

3' 3 1/2"											2' 6"				GAUGE.		Serial number.
12 (a) & (b)	14 (a) to (d)	15 (a)	3 (b) & (c)	8 (c)	18 (a) to (c)	2 (g) to (m)	20 (a) & (b)	21 (a) to (f)	22 (a) to (j)	23 (a)	1 (b)	30 (a)	9 (h) & (i)	1 (e)	Number.		
Bengal and North- West- ern.	Bhav- nagar- Gondal- Juna- gad-Por- bandar.	Burma.	Eastern Bengal.	Hydera- bad-(Go- davari Valley.	Jodhpur- Bika- ner.	Raj- putana- Malwa.	Rohil- kund and Kumaon.	South Indian.	South- ern Maharatta.	Udai- pur- Chitor.	Jubbulpore- Gondia- extension.	Kalka- Simla.	Khushal- garh-Ko- hat-Thal and Now- shera- Durgai.	Raipur- Dham- tari.	Calendar year 1906 by half- years.		
EXPENSES.																	
0.58 0.80	0.87 0.89	0.86 0.81	1.09 1.02	0.83 0.79	0.58 0.60	0.50 0.59	0.70 0.76	0.78 0.69	0.52 0.49	1.75 1.65	1.26 1.19	1.58 1.62	0.49 0.48	...	1st half 2nd "	} 152a	
1.69 1.54	2.12 2.52	2.14 2.12	3.03 3.36	1.55 1.87	1.17 1.07	1.84 1.92	1.65 1.77	1.78 1.72	1.38 1.53	2.13 2.06	1.94 1.91	3.20 3.28	1.45 1.31	1.67 1.27	1st half 2nd "		} 153a
0.44 0.44	0.42 0.48	0.70 0.72	0.76 0.79	0.61 0.73	0.22 0.22	0.48 0.51	0.34 0.38	0.45 0.42	0.49 0.53	0.55 0.31	0.70 0.95	1.12 0.71	0.54 0.56	0.37 0.54	1st half 2nd "	} 154a	
0.50 0.47	0.72 0.53	0.47 0.57	0.70 0.84	0.42 0.47	0.42 0.46	0.52 0.52	0.55 0.60	0.47 0.43	0.28 0.30	0.38 0.17	0.53 0.42	0.30 0.41	0.57 0.61	...	1st half 2nd "		} 155a
0.06 0.05	0.09 ...	0.07 0.12	0.04 0.05	0.05 0.13	0.02 0.05	0.07 0.05	0.06 0.06	0.14 0.05	0.09 0.03	0.07 0.04	0.63 0.05	0.18 0.02	0.12 0.05	...	1st half 2nd "	} 156a	
0.23 0.19	0.48 0.59	0.39 0.21	0.75 0.32	0.24 0.20	0.13 0.22	0.30 0.34	0.47 0.36	0.27 0.23	0.20 0.26	0.63 0.36	0.11 0.17	0.03 0.13	0.17 0.18	0.03 0.03	1st half 2nd "		} 157a
...	...	0.03 0.02	...	...	...	...	...	...	...	...	...	0.10 0.09	...	...	1st half 2nd "	} 158a	
0.03 0.05	0.02 0.03	0.02 0.03	0.01 0.01	0.02 0.02	...	0.01 0.02	0.03 0.03	0.01 0.01	0.02 0.03	0.03 0.04	0.01 0.01	0.03 4.56	0.01 ...	0.01 0.01	1st half 2nd "		} 159a
0.10 0.07	0.24 0.25	...	...	0.24 0.48	0.24 0.45	0.08 0.08	0.22 0.26	0.07 0.07	0.17 0.21	0.37 0.36	0.65 0.57	0.24 0.15	...	...	1st half 2nd "	} 160a	
-0.07 0.08	0.01 0.01	0.03 0.02	0.09 0.07	0.01 0.01	...	...	...	...	0.03 0.03	...	0.02 0.03	0.01 0.01	0.03 0.03	0.03 0.01	1st half 2nd "		} 161a
3.56 3.49	4.97 5.10	4.71 4.62	6.07 6.46	3.77 4.70	2.78 3.07	3.80 4.03	4.62 4.22	3.97 3.62	3.18 3.51	5.61 4.99	5.30 4.33	7.39 11.18	3.28 3.22	2.11 1.89	1st half 2nd "	} 162a	
1.25 1.49	1.40 1.56	1.61 1.90	1.94 1.64	1.15 1.74	1.09 1.33	0.87 1.18	1.37 1.68	1.53 1.49	1.26 1.55	2.18 2.68	2.02 3.62	1.89 1.89	3.24 3.18	...	1st half 2nd "		} 152b
3.63 3.81	3.39 4.07	3.99 4.96	5.36 5.39	2.85 4.11	2.21 2.70	3.17 3.84	3.22 3.95	3.48 3.70	3.31 4.02	2.65 3.33	4.50 5.50	3.84 3.82	9.67 8.75	4.69 5.18	1st half 2nd "	} 153b	
0.95 1.08	0.66 0.85	1.31 1.69	1.34 1.27	1.13 1.00	0.41 0.50	0.82 1.03	0.60 0.85	0.88 0.91	1.18 1.41	0.32 0.49	1.63 2.87	1.25 0.83	3.63 3.77	1.03 2.22	1st half 2nd "		} 154b
1.07 1.15	1.15 0.92	0.88 1.33	1.24 1.35	0.78 1.04	0.80 1.03	0.90 1.08	1.08 1.34	0.92 0.93	0.68 0.78	0.47 0.28	1.35 1.29	0.36 0.48	3.80 4.05	...	1st half 2nd "	} 155b	
0.13 0.13	0.13 ...	0.14 0.28	0.07 0.09	0.09 0.29	0.04 0.11	0.11 0.11	0.12 0.15	0.20 0.11	0.22 0.09	0.08 0.07	0.08 0.24	0.22 0.02	0.84 0.36	...	1st half 2nd "		} 156b
0.49 0.48	0.77 1.03	0.74 0.49	0.62 0.51	0.44 0.43	0.24 0.49	0.53 0.68	0.98 0.79	0.52 0.50	0.49 0.70	0.79 0.58	0.36 0.51	0.76 0.73	1.14 1.19	0.09 0.12	1st half 2nd "	} 157b	
...	...	0.04 0.04	...	...	...	...	...	...	...	...	...	0.12 0.10	...	...	1st half 2nd "		} 158b
0.07 0.12	0.04 0.05	0.04 0.07	0.02 0.02	0.03 0.04	...	0.02 0.04	0.06 0.06	0.02 0.02	0.05 0.07	0.04 0.06	0.03 0.03	0.03 5.32	0.04 0.04	0.04 0.04	1st half 2nd "	} 159b	
0.21 0.18	0.39 0.43	...	...	0.41 1.06	0.45 1.03	0.14 0.15	0.43 0.58	0.15 0.15	0.40 0.56	0.46 0.59	1.52 1.73	0.28 0.17	...	...	1st half 2nd "		} 160b
-0.14 0.19	0.01 0.02	0.04 0.05	0.14 0.11	0.01 0.03	...	0.01 0.01	0.01 0.01	...	0.07 0.07	...	0.05 0.11	0.01 0.01	0.21 0.17	0.07 0.08	1st half 2nd "	} 161b	
7.66 8.61	7.96 8.93	8.79 10.81	10.73 10.88	6.92 10.33	5.24 6.88	6.57 8.07	7.88 9.39	7.76 7.81	7.66 9.25	6.99 8.08	12.34 16.19	8.80 13.37	22.17 21.51	5.93 7.75	1st half 2nd "		} 162b
1.16 1.40	1.40 1.56	1.61 1.89	1.80 1.49	1.15 1.74	1.09 1.33	0.87 1.18	1.37 1.68	1.53 1.49	1.26 1.55	2.18 2.68	2.02 3.62	1.89 1.89	3.24 3.18	...	1st half 2nd "		

APPEN

Analysis of working of each railway

NOTE.— Railways not shown

Serial number.	PARTICULARS.	GAUGE										
		Number	5' 6"									
			1 (a)	2 (a) to (f)	3 (a)	4 (a) to (d)	5 (a) to (f)	6 (a) to (d)	8 (a) & (b)	9 (a) to (g)	10 (a) & (b)	11 (a)
		Calen- dar year 1906 by half- years.	Bengal- Nagpur	Bom- bay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula.	Madras.	Nizam's Guaran- teed State.	North West- ern.	Ondh and Rohil- khand.	Assam- Bengal.
PER TOTAL TRAIN-MILE.												
TABLE E.—GENERAL.												
163a	Home expenditure Annas {	1st half	0 67	0 67	0 12	0 35	0 36	0 39	0 49	0 10	0 09	1 56
	2nd „	0 78	0 68	...	0 41	0 40	0 39	0 63	...	...	...	1 36
164a	Agent's office—salaries and expenses „ {	1st half	0 23	0 23	0 33	0 14	0 21	0 38	0 25	0 14	0 20	0 67
	2nd „	0 28	0 25	0 31	0 1	0 16	0 41	0 28	0 13	0 23	0 55	
165a	Audit, accounts and pay office „ {	1st half	0 70	0 84	0 83	0 46	0 54	0 72	1 07	0 38	0 62	1 12
	2nd „	0 70	0 92	0 82	0 49	0 59	0 69	1 19	0 42	0 67	1 02	
166a	Stores Department „ {	1st half	0 19	0 34	0 27	0 15	0 17	0 11	0 19	0 11	0 16	0 44
	2nd „	0 20	0 35	0 26	0 18	0 19	0 11	0 21	0 11	0 21	0 41	
167a	Medical „ {	1st half	0 22	0 21	0 18	0 16	0 10	0 16	0 16	0 10	0 10	0 42
	2nd „	0 25	0 23	0 19	0 17	0 12	0 16	0 18	0 10	0 11	0 34	
168a	Rents and miscellaneous „ {	1st half	0 25	0 31	0 26	0 22	0 12	0 18	0 30	0 13	0 21	0 15
	2nd „	0 24	0 30	0 18	0 28	0 13	0 17	0 28	0 13	0 21	0 14	
169a	Police „ {	1st half	0 20	0 43	0 17	0 24	0 22	0 4	0 46	0 11	0 18	0 25
	2nd „	0 22	0 14	0 22	0 25	0 24	0 53	0 13	0 16	0 31		
170a	Advertising „ {	1st half	0 01	0 01	0 04	0 01	...	0 02	...	0 01	0 01	...
	2nd „	0 06	0 01	0 04	0 01	...	0 03	0 02	0 01	0 01	0 04	
171a	Electric telegraph „ {	1st half	0 85	1 18	0 91	0 76	0 72	0 89	0 54	0 64	0 66	1 16
	2nd „	0 97	1 27	0 86	0 78	0 76	0 91	0 61	0 66	0 74	1 12	
172a	Other charges (net) „ {	1st half	0 01	...	0 02	0 02	0 02	0 21	...	—0 01	...	0 01
	2nd „	...	—0 01	0 01	0 02	0 03	0 20	...	0 02	...	...	...
173a	Total general charges „ {	1st half	3 40	4 25	3 13	2 51	2 45	3 40	3 46	1 49	2 24	5 78
	2nd „	3 79	4 44	3 09	2 75	2 61	3 12	3 33	1 70	2 35	5 29	
PER CENT ON TOTAL EARNINGS.												
163b	Home expenditure Per cent {	1st half	0 81	0 63	0 21	0 45	0 52	0 55	0 67	0 17	0 17	4 00
	2nd „	1 23	0 77	...	0 55	0 67	0 62	0 89	...	...	...	3 01
164b	Agent's office—salaries and expenses „ {	1st half	0 39	0 21	0 55	0 18	0 29	0 55	0 34	0 22	0 37	1 71
	2nd „	0 45	0 28	0 43	0 20	0 26	0 64	0 39	0 22	0 47	1 20	
165b	Audit, accounts and pay office „ {	1st half	0 94	0 83	1 41	0 59	0 77	1 01	1 47	0 64	1 15	2 87
	2nd „	1 11	1 04	1 12	0 66	0 98	1 07	1 67	0 71	1 37	2 25	
166b	Stores Department „ {	1st half	0 25	0 32	0 45	0 20	0 24	0 15	0 26	0 18	0 29	1 12
	2nd „	0 32	0 40	0 55	0 24	0 32	0 17	0 29	0 19	0 42	0 89	
167b	Medical „ {	1st half	0 29	0 20	0 31	0 20	0 15	0 23	0 22	0 17	0 19	1 07
	2nd „	0 41	0 25	0 25	0 22	0 19	0 25	0 26	0 16	0 23	0 76	
168b	Rents and miscellaneous „ {	1st half	0 34	0 29	0 43	0 28	0 17	0 25	0 41	0 22	0 40	0 40
	2nd „	0 39	0 34	0 52	0 38	0 22	0 26	0 38	0 22	0 43	0 31	
169b	Police „ {	1st half	0 24	0 41	0 29	0 31	0 31	0 48	0 63	0 21	0 39	0 64
	2nd „	0 33	0 50	0 30	0 34	0 41	0 34	0 75	0 21	0 32	0 69	
170b	Advertising „ {	1st half	0 02	...	0 06	0 01	0 01	0 03	0 01	0 02	0 01	0 01
	2nd „	0 09	0 01	0 05	0 02	0 01	0 04	0 03	0 02	0 02	0 02	0 09
171b	Electric telegraph „ {	1st half	1 15	1 11	1 52	0 98	1 03	1 25	0 74	1 07	1 22	2 96
	2nd „	1 54	1 41	1 19	1 05	1 26	1 42	0 85	1 11	1 49	2 48	
172b	Other charges (net) „ {	1st half	0 01	...	0 02	0 03	0 02	0 30	0 01	—0 07	...	0 03
	2nd „	...	—0 01	0 01	0 02	0 03	0 31	...	0 04	...	...	...
173b	Total general charges „ {	1st half	4 58	4 00	5 25	3 23	3 50	4 80	4 76	2 81	4 13	14 81
	2nd „	5 87	5 01	4 22	3 68	4 35	5 32	5 50	2 88	4 76	11 68	
PER CENT ON GROSS EARNINGS.												
TABLE G.—SPECIAL AND MISCEL												
174	Law charges Per cent. {	1st half	0 02	0 01	0 08	0 03	0 04	0 10	0 05	...	...	0 16
	2nd „	0 02	0 03	0 04	0 04	—0 02	0 06	0 02	...	...	...	0 10
175	Compensation „ {	1st half	0 13	0 19	1 11	0 07	0 14	0 11	0 02	0 17	0 10	0 11
	2nd „	0 16	0 29	0 45	0 11	0 20	0 21	0 02	0 25	0 15	0 69	
176	Rates and taxes „ {	1st half	0 15	0 11	0 22	0 14	0 11	0 16	...	0 11	0 06	0 18
	2nd „	0 22	0 12	0 14	0 14	0 21	0 23	0 25	0 10	0 08	0 12	
177	Payments to other lines. „ {	1st half	1 35	0 31	0 24	0 90	0 54	0 28	0 08	0 21	1 63	0 53
	2nd „	1 91	0 19	0 72	0 81	0 85	0 95	0 38	0 14	1 71	1 13	
178	Other charges (net) „ {	1st half	1 17	0 50	0 92	0 27	0 96	1 29	1 31	0 87	1 18	4 23
	2nd „	1 51	1 11	0 93	0 26	1 26	1 23	1 20	0 85	1 19	5 06	
179	Total special and miscel- laneous expenses „ {	1st half	2 82	1 42	2 47	1 41	1 79	1 84	1 46	1 86	2 92	5 21
	2nd „	3 81	1 74	2 28	1 36	2 50	2 68	1 87	1 83	3 13	7 10	

DIX 18—contd.

system during each half-year of 1906—contd.

do not prepare these statistics.

3' 3"											2' 6"				GAUGE.		Serial number.
12 (a) & (b)	14 (a) to (d)	15 (a)	(b) and (c)	8 (c)	13 (a) to (c)	2 (g to m)	20 (a) & (b)	21 (a) to (f)	22 (a) to (j)	23 (a)	1 (b)	30 (a)	9 (h) & (i)	1 (e)	Number.		
Bengal and North-Western.	Bhuvanagar-Gondal-Jungad-Porbandar.	Burma.	Eastern Bengal.	Hyderabad-Godavari Valley.	Jodhpur-Bikaner.	Rajputana-Madwa.	Rohilkund and Kumaon.	South Indian.	South-eastern Mah-ratta.	Udajpur-Chitor.	Jubbulpore-Gondia extension.	Kal ka Siml.	Khushalgarh-Kohat Thul and Nowshera Durgai.	Raipur-Dhamtari.	Calendar year 1906 by half-years.		
CHARGES.																	
0.48	0.11	0.65		0.59	...	0.37	0.95	0.70	0.58	...	1.87	2.39	0.10	1.18	1st half		
0.48	0.14	0.73		0.85	...	0.39	0.98	0.76	0.65	...	2.00	1.98	...	1.19	2nd "		
0.13	0.62	0.23		0.30	0.19	0.12	0.21	0.26	0.4	1.39	...	1.64	0.14	...	1st half		
0.15	0.72	0.24		0.37	0.29	0.14	0.25	0.35	0.29	1.44	...	1.57	0.13	...	2nd "		
0.60	1.20	0.58		1.31	0.44	0.19	0.67	0.75	0.59	1.32	0.09	2.16	0.58	0.10	1st half		
0.62	1.15	0.59		1.61	0.45	0.53	0.86	0.71	0.60	1.12	0.09	2.31	0.41	0.20	2nd "		
0.08	0.29	0.19		0.23	0.09	0.18	0.13	0.20	0.17	0.11	...	0.2	0.11	...	1st half		
0.10	0.34	0.19		0.28	0.10	0.10	0.7	0.19	0.19	0.13	...	0.1	0.11	...	2nd "		
0.09	0.36	0.21		0.28	0.06	0.12	0.09	0.24	0.11	0.23	0.3	0.60	0.09	...	1st half		
0.09	0.52	0.21		0.35	0.08	0.13	0.11	0.1	0.17	0.24	0.20	0.41	0.10	...	2nd "		
0.10	0.24	0.17		0.31	0.11	0.17	0.31	0.13	0.13	0.35	0.07	0.4	0.12	0.04	1st half		
0.11	0.35	0.18		0.39	0.12	0.18	0.3	0.15	0.17	0.2	0.03	0.45	0.3	...	2nd "		
0.22	0.84	0.37		0.43	0.08	0.24	0.32	0.23	0.12	...	0.11	0.38	0.15	0.30	1st half		
0.21	1.09	0.40		0.57	0.09	0.26	0.36	0.26	0.16	...	0.11	0.46	0.35	0.43	2nd "		
0.01	0.01	0.01		0.01	...	...	0.02	0.01	0.01	...	...	0.01	0.01	...	1st half
0.01	...	0.02		0.03	...	0.01	0.03	0.02	0.02	...	...	0.05	0.01	...	2nd "
0.18	1.03	0.67		0.60	0.70	0.66	0.52	0.62	0.7	0.32	1.31	0.52	0.6	0.59	1st half		
0.61	1.22	0.70		0.76	0.71	0.74	0.78	0.65	0.84	0.31	1.29	0.67	0.56	0.47	2nd "		
-0.07	0.01	0.02		0.1	...	...	...	0.02	0.01	...	...	...	...	...	1st half
-0.04	-0.01	0.03		0.1	...	...	...	...	0.01	...	...	...	0.0	...	2nd "
2.22	4.71	3.10		4.07	1.67	2.35	3.28	3.31	3.03	4.31	3.69	9.19	1.98	2.30	1st half		
2.34	5.79	3.27		5.22	1.84	2.58	3.87	3.10	3.36	4.06	3.72	8.27	1.82	2.29	2nd "		
0.94	0.18	1.20		1.06	...	0.63	1.77	1.52	1.26	...	4.23	2.82	0.66	3.26	1st half		
1.04	0.24	1.67		1.80	...	0.77	2.05	1.62	1.68	...	5.97	2.28	...	4.80	2nd "		
0.26	0.99	0.43		0.53	0.35	0.21	0.44	0.10	0.57	1.70	...	1.94	0.80	...	1st half		
0.34	1.28	0.54		0.60	0.63	0.28	0.52	0.54	0.76	2.28	...	1.87	0.87	...	2nd "		
1.17	1.89	1.06		2.34	0.81	0.8	1.24	1.13	1.10	1.36	0.20	3.12	2.51	0.52	1st half		
1.33	2.17	1.35		3.12	0.99	1.04	1.78	1.20	1.71	1.78	0.26	2.67	2.73	0.70	2nd "		
0.15	0.15	0.35		0.41	0.17	0.32	0.24	0.18	0.39	0.16	...	0.18	0.70	...	1st half		
0.20	0.57	0.43		0.60	0.23	0.10	0.35	0.40	0.18	0.20	...	0.22	0.74	...	2nd "		
0.19	0.56	0.37		0.70	0.11	0.20	0.17	0.48	0.34	0.27	0.57	0.70	0.60	...	1st half		
0.20	0.87	0.43		0.75	0.18	0.26	0.24	0.45	0.44	0.38	0.59	0.47	0.62	...	2nd "		
0.19	0.38	0.32		0.56	0.20	0.29	0.74	0.37	0.32	0.43	0.16	0.64	0.80	0.12	1st half		
0.24	0.64	0.36		0.83	0.27	0.34	0.70	0.31	0.43	0.43	0.10	0.52	0.86	...	2nd "		
0.43	1.32	0.69		0.77	0.14	0.40	0.61	0.45	1.00	...	0.24	0.45	2.99	0.82	1st half		
0.46	1.68	0.92		1.21	0.19	0.50	0.75	0.55	0.94	...	0.31	0.11	2.29	1.74	2nd "		
0.01	0.01	0.02		0.02	0.01	...	0.04	0.02	0.02	...	...	0.04	0.06	...	1st half
0.02	0.01	0.03		0.05	...	0.01	0.08	0.03	0.01	...	...	0.1	0.09	...	2nd "
1.14	1.61	1.23		1.08	1.28	1.12	0.96	1.19	1.79	1.13	2.36	0.97	4.12	1.64	1st half		
1.31	2.06	1.59		1.61	1.55	1.44	1.61	1.38	2.19	1.48	3.86	0.64	3.67	1.94	2nd "		
-0.14	0.01	0.04		0.02	...	...	...	0.03	0.01	...	...	...	-0.26	...	1st half
-0.09	-0.01	0.07		0.03	...	...	...	0.01	0.02	...	...	...	0.14	...	2nd "
4.34	7.40	5.69		7.29	3.07	4.00	6.11	6.35	7.20	5.31	8.36	10.24	13.07	6.36	1st half		
5.05	9.81	7.44		11.10	4.04	5.04	8.06	8.79	8.69	6.44	11.12	9.53	12.01	9.32	2nd "		
LANEIOUS EXPENSES.																	
0.02	...	0.04		0.01	...	...	0.01	...	...	...	...	0.08	...	...	1st half
0.02	0.08	0.02		...	...	0.03	0.12	...	0.01	...	...	0.08	...	...	2nd "
0.05	0.01	0.11		0.01	0.16	0.20	0.05	0.03	0.07	0.02	0.01	0.06	0.12	...	1st half		
0.04	0.03	0.13		0.02	0.16	0.30	0.15	0.04	0.10	...	0.03	0.10	0.13	...	2nd "		
0.03	...	0.57		0.01	...	0.11	...	0.13	0.08	...	...	0.96	...	...	1st half
0.04	...	0.08		0.51	...	0.12	0.04	0.22	0.08	...	0.01	0.01	...	...	2nd "
0.50	0.09	...		0.16	1.36	0.31	...	0.13	0.14	1.04	0.04	...	...	...	1st half
1.12	0.13	...		0.25	1.86	0.19	0.09	0.23	0.24	0.17	0.18	...	...	...	2nd "
0.23	0.91	1.30		0.75	0.41	0.80	1.28	0.68	1.67	0.25	1.41	-0.67	3.68	0.60	1st half		
0.28	1.51	1.11		1.41	0.46	1.11	3.38	0.69	1.47	0.45	1.95	0.62	3.35	0.61	2nd "		
0.63	1.01	2.02		0.94	1.93	1.43	1.29	0.92	1.96	1.31	1.49	0.43	2.80	0.60	1st half		
1.50	1.70	1.32		2.19	2.48	1.75	3.67	1.17	1.90	1.62	2.17	1.01	4.48	0.61	2nd "		

Analysis of working of each railway

EXTRACT FROM TABLES PRINTED

NOTE.—Railways not shown

Serial number.	PARTICULARS.	GAUGE.										
		Number	5' 6"									
			1 (a)	2 (a) to (f)	3 (a)	4 (a) to (d)	5 (a) to (f)	6 (a) to (d)	7 (a) & (b)	8 (a) to (g)	9 (a) to (h)	10 (a) & (b)	11 (a)
		Calendar year 1906 by half years.	Bengal, Nag. or.	Bombay, Baroda and Central India.	Eastern Bengal	East Indian.	Gawat Indian Peninsula.	Madras.	Nizam's Guaranteed State.	North Western.	Ordh and Rohilkhand.	Assam-Bengal.
FROM APPENDIX I												
180	Average number of locomotives on the line No.	1st half	290	214	192	912	853	266	59	788	210	77
		2nd "	290	217	198	920	870	276	59	813	198	67
181	Average miles run per locomotive per diem Miles	1st half	69.53	59.87	64.11	70.97	61.39	62.75	65.15	73.32	81.23	70.08
		2nd "	68.88	59.51	72.61	67.16	53.77	60.13	57.32	72.41	82.23	71.19
182	lbs. coal per engine mile (coal burning engines) — Coaching lbs.	1st half		46.93					41.04			
		2nd "		48.15					39.25			
183	Goods "	1st half	55.08	46.58	55.17	51.56	50.00	50.32	52.58	48.88	48.69	35.17
		2nd "	54.16	49.81	56.64	50.17	50.01	50.85	50.91	48.17	45.27	40.61
184	Mixed "	1st half		51.01					48.79			
		2nd "		51.17					48.50			
185	lbs. wood per engine mile (wood burning engines) — Coaching lbs.	1st half	...	...	...	...	...	...	...	...	...	...
		2nd "	...	...	...	...	...	...	...	...	...	...
186	Goods "	1st half	...	...	...	...	...	...	...	...	...	...
		2nd "	...	...	...	...	...	...	...	...	...	...
187	Mixed "	1st half	...	...	...	...	...	...	...	...	...	...
		2nd "	...	...	...	...	...	...	...	...	...	...
188	Average gross weight of trains — Coaching Tons	1st half	192.40	178.90	213.69	225.27	181.12	162.93	118.24	244.88	184.77	119.51
		2nd "	213.25	178.19	227.20	238.22	178.53	149.08	126.41	241.93	175.09	137.10
189	Goods "	1st half	214.51	164.51	252.82	264.62	273.14	241.85	238.46	316.72	332.59	163.18
		2nd "	319.51	207.57	256.5	261.17	332.11	211.44	318.37	315.59	318.01	218.46
190	Mixed "	1st half	353.14	212.10	290.78	269.62	...	331.75	283.78	210.81	208.42	123.27
		2nd "	332.58	199.74	138.68	291.53	...	352.28	298.03	264.63	206.07	167.92
191	Average through speed of trains — Coaching Miles per hour	1st half	28.96	22.96	19.07	12.00	23.46	21.85	22.68	20.04	28.82	...
		2nd "	29.21	22.90	19.17	27.01	23.25	21.28	22.73	20.01	28.89	...
192	Goods "	1st half	11.68	10.78	15.00	12.00	11.49	11.40	9.50	11.11	10.64	...
		2nd "	11.93	10.11	15.00	16.00	10.27	11.42	10.66	11.00	10.38	...
193	Mixed "	1st half	17.38	15.78	14.30	18.00	15.98	10.93	11.55	14.06	16.21	13.12
		2nd "	17.63	16.53	14.30	17.10	15.75	10.85	14.05	14.30	17.74	13.12
FROM APPENDIX II												
194	Average mileage per diem of coaching vehicles, including brakes Miles	1st half	106,256	96,640	76,719	3,8,632	286,818	94,417	16,232	345,264	112,032	33,550
		2nd "	112,926	98,629	79,474	323,458	293,822	95,326	13,793	366,769	109,036	36,272
195	Goods ditto ditto "	1st half	296,707	180,115	78,125	1,083,816	663,577	206,690	53,236	652,525	156,882	46,041
		2nd "	257,412	134,295	98,910	1,040,081	515,890	191,011	40,995	640,136	130,182	56,285
FROM APPENDIX V.												
Average age of sleepers —												
196	Wood Years	1st half	6.66	9.78	8.00	9.67	...	5.69	...	8.11	11.89	...
		2nd "	...	9.84	8.00	8.83	...	5.90	...	8.29	12.29	...
197	Iron "	1st half	10.66	13.91	11.50	9.51	...	32.98	...	12.08	14.95	...
		2nd "	...	14.35	11.50	...	...	33.22	...	12.39	15.38	...
Percentage of removals —												
198	Wood Per cent.	1st half	2.08	3.76	4.28	2.71	5.66	2.24	...	2.68	0.25	3.10
		2nd "	...	3.79	3.04	3.03	4.86	4.50	...	2.73	0.31	3.53
199	Iron "	1st half	0.39	0.52	0.24	3.26	1.03	0.33	...	5.45	4.57	...
		2nd "	...	0.41	0.74	2.28	1.20	0.21	...	3.92	1.01	...

DIX 18—concluded.

system during each half-year of 1906—conold.

as APPENDICES TO THE ANALYSIS.

do not prepare these statistics.

3' 33"											2' 6"				GAUGE.	Serial number.
12 (a) & (b)	14 (a) to (d)	15 (a)	3 (b) and (c)	8 (c)	18 (a) to (c)	2 (a) to (m)	20 (a) & (b)	21 (a) to (f)	22 (a) to (g)	23 (a)	1 (b)	3 (c)	9 (b) & (i)	1 (e)	Number	
Bengal and North-Western.	Ilhanna gar-tion dal-Ju-nagad-Porbandar.	Burma.	Eastern Bengal.	Hyder-abad-davari Valley.	Jodh-pur-Bikan-ner.	Rajpu-tana-Mulwa.	Rohil-kn d and Ka-namon.	South Indian.	South-ern Mah-ratta.	Udai-par-Chiter	Jubbah-pore-Gondal extension.	Bank-impia.	Kha-hal-gorh-Kohat-Thal and Now-hara-Daugul.	Rajpur-Dham-turi.	Calendar year 1906 by half-years.	
235	29	247	152	50	48	418	44	235	237	3	20	24	27	4	1st half	180
265	20	252	170	50	51	413	42	243	237	3	21	15	26	4	2nd "	
71.43	72.05	69.59	58.21	63.81	61.87	55.92	62.76	58.62	66.86	165.27	51.90	17.18	47.50	43.75	1st half	191
62.46	61.57	68.43	64.49	50.00	73.16	15.51	61.09	57.62	59.25	...	52.45	32.06	55.76	43.59	2nd "	
				56.63											1st half	182
				84.35											2nd "	
				35.32											1st half	183
33.81	31.96	37.03	37.94	40.17	36.65	...	29.04	32.10	32.92	48.21	65.43	15.14	55.24	21.65	2nd "	
32.91	28.10	34.84	33.14	37.71	36.59	32.96	...	29.75	32.77	29.85	47.23	39.09	14.02	21.65	1st half	184
				37.16											2nd "	
				33.09												
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1st half	185
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2nd "	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1st half	186
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2nd "	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1st half	187
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2nd "	
173.78	91.71	142.05	111.53	*17.84	123.07	118.93	...	96.37	81.56	...	...	4.31	22.56	...	1st half	188
170.97	101.97	147.41	142.05	*17.00	91.69	112.36	...	87.69	7.13	...	...	50.00	16.63	...	2nd "	
200.15	189.98	189.68	156.63	156.99	80.35	270.01	...	166.60	157.25	...	1.0.26	73.00	33.65	99.45	1st half	189
196.63	198.31	179.46	271.22	171.62	107.25	257.47	...	168.61	173.86	...	130.42	50.00	18.26	59.64	2nd "	
186.88	116.79	177.23	154.23	133.85	111.41	136.23	...	162.35	161.25	162.90	176.32	...	33.62	81.77	1st half	190
178.18	131.49	176.52	150.41	142.00	106.63	131.05	...	163.29	156.05	155.87	170.35	...	48.78	67.62	2nd "	
17.00	20.65	18.75	19.25	...	...	17.27	...	18.90	18.05	...	...	10.00	...	...	1st half	191
17.00	20.65	18.75	19.25	...	...	17.65	18.10	18.00	18.15	...	...	10.00	...	...	2nd "	
9.50	11.26	10.00	11.16	11.01	13.92	9.16	9.62	9.50	7.27	...	9.69	10.00	8.79	...	1st half	192
9.50	11.26	9.71	11.16	11.01	10.72	9.62	9.99	9.50	7.36	...	9.69	10.00	8.83	...	2nd "	
12.20	13.62	12.85	15.00	13.06	10.72	14.11	13.55	12.00	12.35	14.76	11.33	...	9.71	10.27	1st half	193
12.30	13.62	13.13	15.00	13.12	13.92	14.38	13.33	12.00	12.32	14.76	11.33	...	9.68	10.21	2nd "	
117,591	22,539	116,997	68,223	15,864	32,161	203,199	20,702	129,207	98,188	2,492	9,112	1,680	4,950	874	1st half	194
143,562	22,337	117,681	70,467	15,241	33,872	216,480	22,533	139,639	94,979	2,197	5,119	1,723	5,823	781	2nd "	
220,075	23,191	211,387	85,845	37,004	50,685	423,013	27,160	133,452	106,374	1,547	11,534	1,780	5,365	1,939	1st half	195
213,301	18,651	199,901	81,797	27,816	41,377	341,584	21,165	141,594	160,581	1,014	6,573	1,679	5,381	1,341	2nd "	
8.86	13.97	11.53	11.00	...	...	8.00	10.79	12.64	11.00	...	2.45	...	4.17	6.27	1st half	196
9.48	13.16	11.74	10.50	...	12.50	8.50	10.85	12.78	11.00	...	...	...	4.59	...	2nd "	
...	15.96	10.34	14.50	...	13.00	19.50	...	16.91	18.00	...	...	...	3.87	...	1st half	197
...	16.45	10.85	14.00	...	...	20.00	...	17.11	18.50	...	...	...	4.22	...	2nd "	
...	4.51	3.35	3.15	...	...	3.41	...	4.83	2.49	...	...	...	0.31	1.62	1st half	198
1.70	2.38	2.44	2.71	...	0.09	3.26	3.83	2.16	3.22	...	...	...	0.36	...	2nd "	
...	0.17	...	0.58	...	0.12	...	...	0.15	1.28	...	...	...	4.47	...	1st half	199
...	0.05	...	0.47	...	...	0.21	...	0.06	2.39	...	...	...	...	...	2nd "	

* Of local trains only.

Rolling-stock under different heads on each

GAUGE.		5' 6"										3' 3 1/2"									
Items.	NUMBER.	1 (a)	2 (a) to (f)	3 (a)	4 (a) to (d)	5 (a) to (f)	6 (a) to (d)	8 (a) & (b)	9 (a) to (g)	10 (a) & (b)	11	12 (a) & (b)	13 (a) & (b)	14 (a) to (d)	(a)	16	17 (a) & (b)	3 (b) & (c)	8 (c)	18 (a) to (c)	
	Railway.	B. N.	B. B. & C. I.	E. B. S.	E. I.	G. I. P. & I. M.	M.	N. G. S.	N. W.	O. & R.	A. B.	B. & N. W.	B. D.	B. G. J. P.	B.	D.	D. S.	E. B. S. M.	H. G. V.	J. B.	
<i>Engines.</i>																					
1	Engines { Passenger ...	77	88	71	158	802	54	5	820	65	87	45	10	37	28	2	26	68	55	48	
	Goods and mixed ...	214	122	129	788																218	56	140	226	231	82
2	TOTAL ENGINES	291	220	100	946	862	272	61	820	215	87	271	10	37	259	2	26	110	55	48	
<i>Coaching vehicles.</i>																					
3	Saloons, Royal and State	...	...	...	4	...	2	14	8	...	4	3	...	...	2	...	...	3	3	3
4	Saloons, ordinary	2	13	18	...	...	...	...	...	...	...	13	4	2	9	...	...	18	...	1
5	Reserved carriages	16	9	2	43	7	12	6	65	23	...	4	...	7	30	...	...	...	8	...
6	Inspection carriages	1	...	...	...	1	9	...	...	1	8	...	1	...	...	...	...	...	...	5
7	Family carriages	...	...	...	...	8	4	2	...	2	...	...	...	5	1	...	...	...	...	...
8	First class carriages { 4-wheeled	26	2	15	87	92	38	...	82	40	1	40	...	8	27	...	...	14	8	7
	Bogie	...	1	...	2	6	...	9	...	...	...	2	...	...	...	...	...	4	...	...
9	Dining cars	1	...	...	2	12	...	...	1	3	3	3	2	...	1	...	...	...	...	4
10	Composite, first and second class. { 4-wheeled	46	16	50	61	87	68	12	103	56	4	40	1	4	38	...	10	52	11	20	
	Bogie	2	23	12	39	38	...	...	23	10	18	8	6	3	15	...	...	2	2	...
11	Composite, first, second and third class { 4-wheeled	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Bogie	...	...	...	...	17	8	...	46	...	14	...	...	5	28	...	...	...	...	...
12	Other composite carriages	5	3	24	65	5	3	...	31	10	...	...	...	3	11	2	...	3	...	3
13	Second class { Bogie	...	13	...	...	1	...	...	...	...	...	...	...	...	...	...	...	3	...	...
	Ordinary	29	20	16	77	141	79	10	91	33	...	38	1	8	39	...	...	16	10	6
14	Second class with postal accommodation.	...	...	...	...	22	...	...	...	...	...	...	...	5	...	...	...	...	...	...
15	Intermediate class { 4-wheel 1	26	5	29	71	...	4	...	128	39	...	33	...	10	...	...	...	45	...	17
	Ambulance	...	...	16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16	Composite, intermediate and third class { 4-wheeled	15	...	38	39	...	7	...	89	31	...	70	1	...	...	...	...	40	...	3
	Bogie	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17	Intermediate and postal carriages	3	5	6	...	...	...	...	18	...	...	...	2	...	...	...	...	8	...	...
18	Intermediate, third and postal carriages	1	...	3	...	...	...	...	...	...	...	...	3	...	...	...	...	...	...	...
19	Lower class	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20	Third class carriages without brakes. { 4-wheeled	...	158	197	672	608	480	64	67	5	...	354	2	125	233	8	41	232	65	69	
	Bogie	...	81	27	140	67	9	...	...	...	...	6	22	10	162	...	...	89	3	20
	Ambulance	...	15	...	92	16	57	...	174	...	...	...	...	...	51	...	...	...	...	...
21	Third class and postal vans	14	13	3	51	24	12	5	52	33	16	19	...	4	39	...	...	8	4	10
22	Third class carriages with brakes. { 4-wheeled	295	13	...	29	131	12	...	200	85	...	219	...	...	8	...	...	7	...	...
	Bogie	81	20	...	38	33	...	...	265	26	86	46	...	...	37	...	...	...	...	5
23	Brake-vans { 4-wheeled	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Bogie	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
24	Brake-vans with third class	81	...	25	...	13	42	...	99	7	65	...	...	...	43	...	...	...	...	...
25	Brake-vans fitted with postal compartment.	...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...
26	Postal vans	...	...	1	18	9	9	...	10	...	...	...	...	...	5	...	...	3	...	...
27	Composite, postal and other carriages	...	...	...	...	11	...	...	...	...	...	...	...	...	...	...	...	...	...	...
28	Prison vans	...	...	...	...	8	...	...	...	...	...	...	...	...	3	...	...	4	...	...
29	Carriage trucks	4	6	7	39	55	27	2	42	...	...	5	...	6	1	...	...	5	...	...
30	Horse boxes	16	18	20	75	114	56	10	142	43	16	30	1	5	37	...	8	10	10	12	
31	Luggage vans	31	26	26	48	115	40	6	61	43	12	1	...	...	29	...	4	10	...	...
32	Produce Vendors' vans	...	...	16	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
33	Milk vans	...	...	23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
34	Fish vans	...	...	31	...	...	...	...	...	...	8	...	...	...	...	...	2	23	...	...
35	Store, ice and stationery vans	...	...	...	1	...	...	...	18	...	...	...	...	...	...	...	...	...	...	...
36	Miscellaneous	11	...	9	...	...	...	...	2	4	1	...	...	...	29	...	2	13	...	...
37	TOTAL COACHING VEHICLES	856	616	719	2,495	2,375	1,229	189	2,552	860	268	1,129	63	265	1,038	12	89	661	164	217	

DIX 22.

railway at close of the calendar year 1906.

3' 31"						2' 6"														2' 0"										Items.
19	6 (g) & (f)	2 (g) to (m)	(n) & (b)	21 (a) to (f)	22 (a) to (j)	23	24	25	26	27	3 (b) & (d)	2 (n) & (o)	1 (b) & (e)	30	9 (h) & (i)	6 (g) & (h)	19	1 (c)	1 (d)	20 (c)	32	33	9 (j)	35	5 (g)	26	37	38		
M. R. W.	N. & S.O	R.M.	R. & K.	S. I.	S. M.	U. C.	B. L.	B. L.	B. H.	C.	E. I. S.N.	O. D. & R.	G. E. R.D.	K. S.	K. T. N. D.	M.D. & T.K.	M. R. W.	M. B.	P. L. L.	P. W. L.	B. P.	1 B.	D. L.	D. H.	G. L.	H. A.	H. S.	J.		
3	18	145 303	48	83 165	42 195	1 2	3	7	3	3	2 13	11	6 23	24	30	6	4 1	3	3	5	5	3	7	17	15	11	4	7	1	
2																													2	
5	18	418	48	218	237	3	3	7	3	3	15	11	29	24	30	6	5	3	3	5	5	3	7	17	15	11	4	7	2	
...	1	5	...	3	6	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	2	...	...	...	3
...	2	...	...	3	...	...	...	...	...	...	2	3	...	...	...	...	3	...	...	...	...	...	...	3	2	...	...	...	4
...	...	4	...	12	...	...	1	1	...	...	...	...	2	4	3	...	...	...	...	...	...	...	...	...	1	...	...	...	5
...	13	2	14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	1	...	...	...	6
3	...	...	...	3	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7
3	108	6	15	44	...	...	...	1	1	...	1	...	12	3	...	2	...	...	...	...	...	...	18	...	...	...	...	...	8
2	...	6	...	...	...	...	...	...	...	...	6	...	1	...	...	...	...	...	...	...	...	...	1	4	...	...	...	...	9
...	3	2	1	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10
5	1	48	8	40	54	3	2	...	1	...	6	...	2	4	8	...	4	...	3	2	...	...	5	...	3	...	...	...	11
2	34	6	3	12	...	...	...	...	...	...	...	...	4	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	12
...	13
2	...	...	42	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	...	...	...	...	...	14
...	10	...	9	...	...	...	4	...	...	9	...	6	...	...	...	...	2	1	...	1	2	...	...	2	4	2	2	...	15
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	16
3	87	6	25	37	1	...	...	...	...	...	...	...	10	...	4	...	...	...	...	...	...	25	3	...	...	...	...	...	17
3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	18
30	51	3	...	...	2	1	...	2	...	2	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	19
...	20
...	15	10	...	...	...	...	...	...	...	...	2	...	...	5	...	...	...	...	...	2	...	...	...	...	3	2	...	...	21
...	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	22
...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	23
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	24
6	10	276	14	84	45	3	...	3	1	7	11	3	18	14	...	6	...	3	...	3	...	...	...	4	7	1	...	...	25
4	...	2	45	180	...	3	...	...	...	7	...	15	...	1	7	...	...	...	...	4	1	...	...	6	2	1	...	...	26
...	...	23	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	3	...	...	...	...	...	...	...	27
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	28
3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	29
...	5	...	...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	30
8	98	...	5	14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	31
2	3	82	10	30	47	1	...	...	...	...	2	2	...	...	...	2	...	...	...	...	...	...	...	5	...	...	...	...	32
...	27	...	81	23	...	...	...	...	...	...	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	33
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	34
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	35
...	1	...	10	10	...	...	...	...	...	...	1	...	...	...	6	...	...	...	...	...	...	...	...	3	2	...	...	...	36
55	57	1,703	227	1,181	1,056	26	23	33	19	3	63	51	76	92	80	21	53	9	8	18	25	15	...	99	73	78	...	...	37

Rolling-stock under different heads on each

GAUGE.		5' 6"									3' 3 1/2"										
NUMBER.	1 (a)	2 (a) to (f)	3 (a)	4 (a) to (d)	5 (a) to (f)	6 (a) to (d)	8 (a) & (b)	9 (a) to (g)	10 (a) & (b)	11	12 (a) & (b)	13 (a) & (b)	14 (a) to (d)	15 (a)	16	17 (a) & (b)	3 (b) & (c)	8 (c)	18 (a) to (c)		
Railway.	B. N.	B. R. & C. I.	E. B. S.	E. I.	G. I. P. & L. M.	M.	N. G. S.	N. W.	O. & R.	A. B.	B. & N. W.	B. D.	B. G. J. P.	B.	D.	D. S.	E. B. S. M.	H. C. V.	J. B.		
Goods vehicles.																					
38	Covered goods wagons, bogie.	Ordinary	...	...	...	...	...	...	2,151	100	200	...	...	625	...	...	310	...	6
		Military	...	...	...	...	...	...	474	2,730	...	...	...	...	75	...	...	...	...
39	Covered goods wagons, 4-wheeled.	Ordinary	2,438	1,513	1,904	2,391	7,676	928	59	2,507	...	1,313	5,310	203	153	2,760	4	223	2,335	403	616
		Military	1,278	1,104	1,382	1,917	102	6,195	145	20	458	100	...	
40	High-sided wagons, bogie	...	...	...	...	50	...	10	...	25	...	...	...	16	...	...	...	2	...
41	High-sided wagons, 4-wheeled	...	1,003	1	2,110	3,578	1,720	799	1,112	...	...	...	...	61	...	744	...	277	...
42	Medium-sided wagons, bogie	...	...	...	...	...	...	...	...	...	...	...	...	310	...	...	...	...	...
43	Medium-sided wagons, 4-wheeled	290	443	...	...	...	...	...	...	...	...	...	...	...	6	...	...	...	...
44	Low-sided wagons, bogie.	Ordinary	...	...	...	...	...	102	16	...	28	...	20	115	...	...	54	...	152
		Military	...	95	...	...	...	...	110	374	...	...	...	...	...	...	...	...	...
45	Low-sided wagons, 4-wheeled.	Ordinary	190	102	109	6,675	205	...	181	...	300	467	66	565	70	235	...	143	
		Military	156	85	367	229	...	1,241	186	223	
46	Coal or coke wagons	2,993	100	...	1,357	...	30	...	...	110	...	...	...	...	...	...	...	...	...
47	Cattle wagons	...	...	1	7	...	1	...	21	...	4	...	6	160	...	...	...	...	35
48	Accident vans	14	14	13	10	39	18	...	...	5	...	1	...	14	...	...	8	...	...
49	Platform wagons	...	...	...	41	...	3	...	...	...	2	...	...	...	...	...	3	...	...
50	Powder vans	6	6	5	31	24	9	...	50	8	3	1	...	2	12	...	1	2	...	1	
51	Timber trucks	36	20	16	...	191	215	10	49	...	35	279	11	22	95	...	51	114	20	...	
52	Bolster trucks	Double	...	...	...	...	...	...	...	...	...	...	...	...	117	...	...	...	...
		Single	14	...	71	...	50	...	...	271	...	16	...	...	150	...	...	...	...
53	Ballast wagons	76	450	36	...	136	150	64	...	...	50	...	71	146	...	...	50	83	...
54	Travelling oil tanks	31	20	28	69	31	45	...	51	12	3	6	...	2	2	...	14	1	...		
55	Travelling water tanks	...	25	8	...	11	10	3	72	1	...	...	1	23	...	...	...	1	10
56	Travelling gas holders	8	8	2	3	17	12	2	15	8	8	...	...	...	...	...	4	2	...
57	Travelling cranes	11	4	7	31	57	15	2	52	17	15	19	3	2	20	...	2	13	2	...	
58	Miscellaneous	21	8	16	8	1	16	7	16	7	12	9	1	56	98	...	20	6	...		
59	TOTAL GOODS VEHICLES		7,612	5,130	4,659	8,743	12,166	1,918	1,058	2,852	5,583	2,016	6,321	41	1,018	5,263	110	1,134	3,775	897	992

LOWER CLASS CARRIAGES FITTED

Intermediate class	...	18	7	14	...	...	...	...	...	...	...	...	...	11	...	...	...	...	...	20
Composite, intermediate & 3rd class	...	1	19	50	...	...	...	...	...	...	...	...	...	...	5	...	...	...	22	24
Third class	40	91	4	256	100	81	...	...	19	19	...	3	39	52	...	...	...	...	...	88
TOTAL	40	113	30	310	100	81	...	...	19	19	...	3	53	57	...	...	...	22	...	192

LOWER CLASS CARRIAGES PROVIDED WITH LATRINE

Intermediate class	26	18	14	6	...	4	...	13	37	45	...	3	11	...	...	...	45	...	20
Composite, intermediate & 3rd class	34	1	21	60	57	64	...	96	21	...	...	...	...	33	...	...	40	...	24
Third class	69	94	72	274	114	94	64	562	191	44	...	3	39	72	...	12	257	68	88
TOTAL	129	113	117	398	171	162	64	791	210	89	...	6	53	105	...	13	342	68	132

DIX 22—concl'd.

railway at close of the calendar year 1906.

3' 8 1/2"						2' 8"																2' 0"								Items.
19	6(e) & (f)	2 (g) to (m)	20(a) & (b)	21(a) to (f)	22(a) to (j)	23	24	25	26	27	3 (b) & (d)	3 (n) & (o)	1 (b) & (e)	30	9 (h) & (i)	6 (g) & (h)	19	1 (c)	1 (d)	20 (c)	32	33	9 (j)	35	5 (g)	36	37	38		
M. R. W.	N & S.C	R. M.	R. & K	S. I.	S.M.	U. C.	B. B. L.	B. L.	B. B.	C.	H.H. S.N.	G. D. & R.	J.P. & E.D.	K. S.	K.K. T. & N.D	M.D & T.K.	M. R. W.	M. B.	P. L. L.	P. W. L.	B. P.	T. B.	D. L.	D. H.	G. L.	H. A.	H. S.	J.		
...	75	471	345	75	85	27	150	20	49	24	10	2	2	1	42	}	38
...
29	...	3,579	769	2,055	3,526	25	6	...	14	...	103	38	20	79	25	...	10	2	...	57	20	30	...	49	...	14	4	...	}	39
...	...	1,101	...	260	193
15	43	...	...	22	57	...	...	5	2	...	...	...	...	...	13	24	9	...	...	...	...	...	...	...	2	10	...	23	40
25	...	134	...	769	170	...	...	...	6	14	...	...	...	25	19	...	...	...	...	...	...	12	...	164	43	4	4	...	41
...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	42
...	...	150	...	...	140	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	43
...	...	237	30	20	59	...	4	...	96	50	38	...	12	4	}	44
...	7	953	14
...	...	13	143	...	438	10	19	...	12	...	40	73	30	30	4	2	3	21	6	...	7	...	4	...	3	}	45
...	...	1,200	69	10
...	...	...	...	...	350	...	...	...	...	...	...	...	65	...	69	...	...	...	...	...	...	...	326	...	...	...	...	...	46
...	...	...	...	6	28	...	...	...	...	...	...	...	...	...	10	...	...	...	...	...	...	...	...	...	...	...	...	...	47
1	...	16	6	...	13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	48
...	...	...	...	4	45	...	...	...	...	...	1	...	...	1	7	...	...	...	...	...	...	2	...	...	...	...	...	...	49
...	1	35	2	7	13	...	...	...	...	...	...	1	...	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	50
...	8	79	76	33	127	...	...	...	...	...	24	...	23	4	...	...	...	...	...	2	...	...	...	6	...	...	...	...	51
...	38	30	110	}	52
...	65	1
...	22	...	...	522	...	...	...	2	...	...	...	...	...	...	150	...	...	...	...	...	...	...	...	...	100	...	...	...	53
...	4	21	...	24	8	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	54
...	...	...	...	23	8	...	...	...	...	...	2	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	55
...	...	...	...	...	25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	56
...	...	27	10	8	21	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	57
...	...	1	...	5	20	...	...	...	...	...	...	2	...	...	...	...	...	...	...	8	...	...	...	8	...	...	...	...	58
70	171	9,007	1,381	3,491	5,362	35	25	94	34	18	280	210	340	161	431	48	68	12	16	71	41	50	326	254	237	32	8	78	59	

WITH CLOSETS FOR FEMALES.

...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	16	...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	22	...	29	55	63	15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	22	...	45	55	63	17	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	60

ACCOMMODATION, INCLUDING (ITEM 60) CARRIAGES FITTED WITH CLOSETS FOR FEMALES.

5	...	51	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	5	81	16	26	...	...	...	4	...	...	2	...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...
...	22	219	29	117	121	15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	...	...	...	...	...
5	27	351	45	143	121	17	...	4	...	...	2	...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...	61

Progressive No.	GAUGE	5' 0'						
	NUMBER.	1 (a).	2 (a) to (f).	3 (a).	4 (a) to (d).	5 (a) to (f).	6 (a) to (d).	8 (a) & (b).
	Particulars.	B. N.	B. B. & C. I.	E. B. S.	E. I.	G. I. P.	M.	N. G. S.

ENGINES.

(In the table below except where separately shown, the Passenger engines are included with Goods and Mixed engines.)

1	Passenger engines	Number at close of 1905	77	687	71	150	...	54	5
2		Number added in 1906	...	1	...	8	...	...	...
3		Number at close of 1906	77	688	71	158	...	54	5
4		Number added in 1906	214	132	115	802	823	212	56
5	Goods and mixed engines	Number at close of 1905	...	...	14	4	19	6	...
6		Number added in 1906	214	12	129	788	862	218	56
7	Total number of locomotives on the 31st December		291	220	209	946	862	272	61
8	Number per mile of line open of all classes		0.17	0.25	0.10	0.19	0.31	0.19	0.17
9	Average mileage run by Passenger		29,635	25,152	28,748	37,559	26,685	32,144	18,692
10	each per annum.		17,974	11,227	21,913	22,126	17,851	18,648	26,772
11	Goods		25,163	20,251	21,359	24,713	20,582	21,410	20,602
12	All classes		80	19	79	103	73	18	51
13	Average mileage run by Passenger		49	31	60	60	49	55	57
14	each per diem		69	55	67	68	56	62	56
15	Goods		7,981	6,756	5,344	8,020	6,216	6,097	6,489
16	All classes		54	39	22	105	175	64	10
17	Ton mileage hauled per engine, in thousands of tons		147.92	...	...	...	308.58	...	21.29
18	Average under repairs or renewals at any one time		8.729	...	...	...	10,967	...	6,843
19	Total value, in thousands of rupees		...	...	...	...	...	...	...
20	Total value per mile of line open		...	...	...	...	...	...	...

COACHING STOCK.

(In the table below where the value of coaching stock is not shown it is included with that of Goods.)

19	Number at close of 1905	911	634	712	2,375	2,258	1,212	188
20	Number added in 1906	45	12	7	120	87	17	1
21	Number at close of 1906	956	646	719	2,495	2,375	1,229	189
22	1st class	0.04	0.05	0.13	0.08	0.07	0.07	0.11
23	2nd class	0.03	0.07	0.11	0.05	0.08	0.08	0.05
24	Intermediate class	0.02	0.03	0.06	0.06	...	0.01	...
25	3rd class	0.02	0.06	0.06	0.43	0.31	0.39	0.19
26	All other classes	0.19	0.27	0.45	0.41	0.34	0.29	0.19
27	Total of all classes	0.54	0.78	1.44	1.01	0.84	0.84	0.54
28	1st class	38,341	...	35,897	62,577	62,463	30,106	...
29	2nd class	49,973	...	46,140	77,482	55,060	30,101	...
30	Intermediate class	72,023	...	48,220	87,635	...	51,446	...
31	3rd class	42,797	...	47,881	67,500	63,141	37,295	...
32	All other classes	38,182	...	30,542	36,063	24,324	31,731	...
33	Total of all classes	42,793	57,183	41,398	56,208	44,612	34,191	41,368
34	Average mileage run by each per diem	116	157	113	154	112	94	119
35	Freight ton-mileage per vehicle, in thousands of tons	39	69	31	10	29	32	10
36	Average under repairs or renewals at any one time	132	82	57	878	218	50	17
37	Total value, in thousands of rupees	76.34	...	...	...	1,28.73	...	7.38
38	Total value per mile of line open	4,305	...	...	...	4,575	...	2,012

GOODS STOCK.

39	Covered wagons	3,776	2,717	3,315	8,248	7,546	2,900	161
40	Open	3,074	2,381	509	9,032	4,039	1,762	759
41	Timber trucks, including bolster trucks	50	20	125	...	241	185	10
42	All other classes	81	87	104	215	178	71	78
43	Total of all classes	7,879	5,105	4,053	17,495	12,014	4,918	1,068
44	Covered wagons	...	...	61	143	110	...	...
45	Open	253	27	26	1,110	20	...	10
46	Timber trucks, including bolster trucks	...	...	35	...	...	...	...
47	All other classes	...	2	6	27	2	...	...
48	Total of all classes	253	25	6	1,280	162	...	50
49	Covered wagons	3,776	2,717	3,378	8,391	7,686	2,900	161
50	Open	3,725	2,308	483	10,142	4,069	1,762	809
51	Timber trucks, including bolster trucks	50	20	90	...	241	185	10
52	All other classes	81	85	110	242	160	71	78
53	Total of all classes	7,832	5,180	4,059	18,775	12,166	4,918	1,058
54	Number of all classes per mile of line open	4.31	5.90	8.15	7.71	4.30	3.35	8.01
55	Average mileage run by each per annum	18,988	11,791	7,815	18,528	17,676	12,673	19,292
56	Average mileage run by each per diem	50	32	21	51	48	35	58
57	Average tare in tons	8.23	6.94	7.70	7.32	7.62	7.50	7.26
58	Covered wagons	8.31	6.56	7.43	6.73	6.86	6.61	6.89
59	Open	15.07	14.41	13.05	15.11	14.74	14.37	13.93
60	Average carrying capacity in tons	16.99	14.33	15.95	15.06	14.39	13.90	16.99
61	Average load of a goods vehicle, loaded and empty, per mile	7.11	7.02	7.45	7.37	6.70	5.69	7.18
62	Freight ton-mileage per vehicle, in thousands of tons	89	80	60	143	169	73	107
63	Average under repairs or renewals at any one time	236	233	224	791	773	196	48
64	Total value, in thousands of rupees	2,17.29	...	...	...	2,64.74	...	24.33
65	Total value per mile of line open	12,828	...	...	...	9,469	...	6,915
66	Grand total value of rolling-stock, in thousands of rupees	4,41.55	2,42.70	2,17.40	12,46.74	7,02.05	2,79.86	16.20
67	Grand total value of rolling-stock per mile of line open	26,085	27,918	48,658	51,848	24,948	19,077	15,968

DIX 23.

work done by, Rolling-stock.

5' 6"		3' 3 1/2"												Progressive No.
9 (a) to (g)	10 (a) & (b)	11	12 (a) & (b)	13 (a) & (b)	14 (a) to (d)	15 (a)	16	17 (a) & (b)	3 (b) & (c)	8 (c)	18 (a) to (c)	19	6 (e) & (f)	2 (g) to (m)
N. W.	O. & E.	A. B.	B. & N. W.	B. D.	B. G. J. P.	B.	D.	D. S.	E. B. S. M.	H. G. V.	J. B.	M. E. W.	N. & S. C.	R. M.

ENGINES.

(In the table below except where separately shown, the Passenger engines are included with Goods and Mixed engines.)

...	65	...	35	...	...	28	...	...	63	...	...	3	6	145	1
...	65	...	10	...	...	28	...	...	5	...	...	3	-6	145	2
756	140	77	205	10	37	223	2	22	74	55	48	1	12	303	3
64	...	10	21	...	...	8	...	4	8	...	...	1	6	...	4
820	140	87	226	10	37	231	2	26	82	55	48	2	15	303	5
820	205	87	271	10	37	259	2	26	150	55	48	5	13	418	6
0-20	0 16	0 11	0 17	0 06	0 08	0 19	0 40	0 30	0 23	0 14	0 06	0 07	0 22	0 21	7
...	48,982	...	16,313	...	...	31,040	...	...	25,157	...	...	14,120	...	24,812	8
...	14,275	...	18,823	...	...	18,367	...	...	19,385	...	...	11,771	...	18,996	9
25,964	29,54	24,019	22,418	26,314	18,186	23,875	20,192	15,790	21,917	18,963	23,120	13,117	12,725	20,878	10
...	134	...	45	...	...	85	...	...	69	...	...	39	...	68	11
...	39	...	51	...	...	60	...	...	53	...	...	33	...	52	12
71	82	66	61	72	50	65	56	43	61	32	80	37	36	57	13
7,827	7,618	3,804	4,138	...	2,919	4	...	...	2,479	3,286	5,535	...	1,394	4,175	14
...	28	6	20	...	1	18	...	4	30	7	7	1	2	52	15
5,67,50	69,61	...	81,17	2,70	7,58	73,12	...	...	...	16,05	19,48	...	457	...	16
9,135	5,256	...	5,270	1,65	1,661	5,155	...	...	...	4,257	1,666	2,079	5,595	...	17
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	18

COACHING STOCK.

(In the table below where the value of coaching stock is not shown it is included with that of Goods.)

2,399	853	259	1,029	63	255	985	12	84	691	164	217	55	52	1,679	19
151	7	7	93	...	255	53	...	5	17	...	...	...	5	24	20
2,552	860	266	1,128	63	255	1,048	12	89	664	164	217	55	57	1,703	21
0 04	0 08	0 04	0 05	...	0 06	0 07	...	0 13	0 03	0 07	0 04	0 14	0 08	...	22
0 04	0 05	0 02	0 04	...	0 04	0 06	...	...	0 06	0 04	0 02	0 03	0 03	...	23
0 04	0 04	0 02	0 04	...	0 03	...	...	...	0 09	...	0 02	0 41	...	...	24
0 26	0 28	0 13	0 41	...	0 30	0 42	...	0 53	0 41	0 18	0 12	...	0 33	...	25
0 23	0 20	0 13	0 15	...	0 13	0 21	...	0 48	0 22	0 13	0 06	0 11	0 26	...	26
0 61	0 65	0 34	0 69	0 41	0 56	0 77	2 40	1 14	0 86	0 42	0 26	0 74	0 70	0 83	27
57,913	5,277	35,281	52,273	...	...	21,512	...	...	...	...	...	...	15,430	...	28
54,463	3,981	32,646	62,419	...	...	30,912	...	...	...	...	...	...	31,466	...	29
59,445	3,043	31,170	81,281	...	...	...	...	...	...	...	...	...	...	...	30
64,194	18,854	33,785	43,075	...	...	35,425	...	...	...	...	...	...	18,371	...	31
33,634	13,526	24,569	42,224	...	...	30,652	...	...	...	...	...	...	16,078	...	32
51,395	41,011	32,328	55,711	...	32,060	32,685	...	...	39,306	41,827	57,084	...	18,010	47,578	33
141	121	80	153	...	88	90	...	...	108	115	156	...	49	131	34
41	38	25	82	...	23	26	...	...	27	31	85	...	20	32	35
224	67	27	66	10	25	112	...	9	79	11	13	8	1	141	36
1,89,18	...	...	...	...	8,08	58,52	...	...	...	8,76	...	1,66	...	...	37
5,620	...	...	...	...	1,774	4,389	...	...	...	2,238	...	2,252	...	...	38

GOODS STOCK.

8,182	4,684	1,225	5,954	263	208	3,691	4	223	2,834	403	602	29	79	5,159	39
2,917	...	420	...	66	705	9 8	6	814	551	382	295	25	83	2,677	40
320	646	62	279	14	22	398	...	50	114	20	...	...	8	79	41
253	49	87	37	5	23	164	...	2	58	12	44	1	...	100	42
11,622	5,579	1,813	6,270	318	1,018	5,155	10	1,039	3,587	817	941	55	170	8,009	43
1,044	...	188	...	...	...	4	...	...	199	100	50	...	1	...	44
159	...	23	51	...	...	130	...	...	16	-20	-1	15	...	...	45
...	...	-27	...	...	...	4	...	4	...	...	...	...	...	...	46
27	4	18	...	...	...	15	...	1	6	...	...	...	...	...	47
1,230	4	203	51	...	...	105	...	5	221	80	51	15	1	2	48
9,176	4,684	1,413	6,005	263	208	3,640	4	223	3,033	503	652	29	80	5,151	49
3,076	...	488	...	66	703	1,033	6	814	567	362	294	40	83	2,677	50
320	646	35	279	14	22	402	...	54	114	20	...	...	8	79	51
253	49	100	37	5	23	179	...	3	64	12	46	...	...	100	52
12,852	5,583	2,016	6,321	348	1,048	5,260	10	1,094	3,778	897	992	70	171	8,007	53
3 08	4 22	2 62	3 28	2 27	2 30	3 22	3 00	12 71	4 90	2 20	1 19	0 94	3 09	9 93	54
18,549	11,170	7,152	11,061	...	6,200	11,636	...	...	7,324	11,032	16,762	...	3,668	16,617	55
51	81	20	30	...	17	32	...	...	20	30	46	...	10	45	56
7 54	7 22	4 81	3 82	...	3 72	4 62	...	...	5 11	4 37	3 74	4 75	8 23	4 00	57
7 15	...	3 38	...	...	3 13	3 01	...	...	3 48	4 04	4 75	5 60	6 58	4 32	58
17 38	12 40	10 22	10 34	...	7 35	9 84	...	...	9 37	10 96	10 66	7 50	17 02	9 02	59
14 21	...	7 23	...	...	7 44	8 41	...	...	7 37	11 05	13 29	11 80	15 61	12 45	60
8 28	5 90	4 77	3 97	...	2 86	3 54	...	...	4 36	4 19	4 10	...	4 42	4 15	61
153	66	43	301	13	18	48	...	...	35	46	72	...	17	70	62
450	154	59	...	...	28	460	...	17	169	81	18	...	1	219	63
3,55,52	1,07,70	...	1,48,91	9,33	12,53	90,50	...	...	...	14,76	27,97	2,25	10,27	...	64
10,562	12,666	...	9,632	6,099	2,751	6,778	...	...	...	3,788	3,357	3,048	12,569	...	65
8,52,80	2,27,31	90,98	3,30,88	12,03	28,17	3,22,71	Informa- tion not available	24,17	1,89,23	40,17	41,85	5,45	14,84	2,57,14	66
20,407	19,061	11,794	14,902	7,663	6,191	16,623	...	31,300	16,072	10,374	5,021	7,365	18,098	12,605	67

APPENDIX

Number of, outlay on, and

Progressive No.	GAUGE.		3' 3 1/4"				2' 6"					
	NUMBER.		20 (a) & (b)	21 (a) to (f)	22 (a) to (j)	23	24	25	26	27	28 (b) & (d)	29 (n) & (o)
	Particulars.		R. & K.	S. I.	S. M.	U. C.	B. B. L.	B. L.	B. B.	C.	E. B. S. N.	G. D. & R.

ENGINES.

(In the table below except where separately shown, the Passenger engines are included with Goods and Mixed engines.)

1	Passenger engines.	Number at close of 1905	...	73	42	1	...	...	...	...	2	...
2		Number added in 1906	...	10	...	...	...	...	...	...	...	...
3		Number at close of 1906	...	83	42	1	...	...	...	...	2	...
4	Goods and mixed engines.	Number at close of 1905	40	155	195	2	3	7	3	2	13	11
5		Number added in 1906	8	10	...	...	...	...	...	1	...	...
6		Number at close of 1906	48	165	195	2	3	7	3	3	13	11
7	Total number of locomotives on the 31st December		48	218	237	3	3	7	3	3	15	11
8	Number per mile of line open of all classes		0.14	0.18	0.14	0.04	0.12	0.09	0.16	0.25	0.17	0.08
9	Average mile- age run by each per annum.	Passenger	7,927	27,966	26,946	...	...	...	...	...	...	...
10		Goods	8,161	14,221	19,091	...	...	...	...	...	...	...
11		All classes	4,150	20,656	23,002	19,175	17,212	38,687	10,404	5,408	13,724	13,208
12	Average mile- age run by each per annum.	Passenger	22	77	74	...	...	...	...	...	...	...
13		Goods	22	39	52	...	...	...	...	...	...	...
14		All classes	11	56	63	53	47	106	28	15	38	36
15	Ton-mileage hauled per engine, in thousands of tons		3,646	3,596	3,821	3,814	...	...	...	73	...	...
16	Average under repairs or renewals at any one time		7	24	41	1	...	1	...	1	3	2
17	Total value, in thousands of rupees		12.79	...	57.34	95	77	...	70	27	...	1.44
18	Total value per mile of line open		3,603	...	3,319	1,354	2,941	...	3,786	2,371	...	1,004

COACHING STOCK.

(In the table below where the value of coaching stock is not shown it is included with that of Goods.)

19	Number at close of 1905	181	1,099	1,053	26	13	7	24	3	63	54
20	Number added in 1906	43	32	3	...	10	26	5	...	...	...
21	Number at close of 1906	227	1,131	1,056	26	23	33	19	3	63	51
22	1st class	0.08	0.07	0.05	0.01	...	...	...	0.08	...	...
23	2nd class	0.04	0.05	0.04	0.03	...	...	...	...	...	...
24	Intermediate class	0.03	...	...	0.03	...	...	...	...	...	...
25	3rd class	0.33	0.53	0.32	0.22	...	0.36	...	0.08	...	...
26	All other classes	0.16	0.18	0.20	0.16	...	0.06	...	0.08	...	...
27	Total of all classes	0.61	0.83	0.61	0.37	0.88	0.12	1.00	0.24	0.71	0.39
28	1st class	...	35,702	...	...	...	...	...	6,500	...	...
29	2nd class	...	41,784	...	...	...	...	...	...	...	...
30	Intermediate class	...	...	...	...	...	...	...	...	...	...
31	3rd class	...	47,739	...	...	...	...	...	6,500	...	...
32	All other classes	...	37,170	...	...	...	...	...	6,500	...	...
33	Total of all classes	36,142	44,671	32,742	32,901	...	16,801	...	6,500	...	...
34	Average mileage run by each per annum	99	121	90	90	...	46	...	23	...	...
35	Freight ton-mileage per vehicle, in thousands of tons	22	78	20	20	...	1	...	...	9	...
36	Average under repairs or renewals at any one time	22	83	48	2	...	...	...	...	...	...
37	Total value, in thousands of rupees	...	...	...	...	...	...	...	1	...	1.20
38	Total value per mile of line open	...	...	...	...	...	...	...	77	...	981

GOODS STOCK.

39	Number at close of 1905	Covered wagons	1,015	2,281	3,700	25	6	7	14	...	103	55
40		Open	113	1,393	1,044	10	19	15	2	18	41	152
41		Timber trucks, including bolster trucks	76	71	267	...	...	39	...	...	132	...
42		All other classes	15	8	207	...	...	1	12	...	3	2
43		Total of all classes	1,219	3,753	5,218	35	25	62	28	18	279	200
44	Number added in 1906	Covered wagons	99	150	162	...	...	20	...	...	...	...
45		Open	60	12	24	...	...	51	18	...	1	17
46		Timber trucks, including bolster trucks	...	...	...	...	...	39	...	...	2	...
47		All other classes	8	...	6	...	...	...	12	...	...	1
48		Total of all classes	162	138	144	...	...	32	6	...	...	1
49		Covered wagons	1,114	2,431	3,682	25	6	27	14	...	103	38
50	Number at close of 1906	Open	173	1,381	1,020	10	19	66	20	18	40	169
51		Timber trucks, including bolster trucks	76	71	267	...	...	...	...	...	134	...
52		All other classes	18	8	213	...	...	1	...	...	3	9
53		Total of all classes	1,381	3,891	5,362	35	25	94	34	18	280	210
54	Number of all classes per mile of line open		3.88	2.87	3.20	0.50	0.96	1.21	1.79	1.54	3.15	1.59
55	Average mileage run by each per annum		9,218	11,858	11,808	13,734	...	1,928	...	9,709	...	...
56	Average mileage run by each per diem		25	32	32	28	...	5	...	15	...	...
57	Average tare in tons	Covered wagons	4.12	4.44	4.02	4.02	...	5.90	...	...	...	...
58		Open	3.57	3.79	3.27	3.22	...	4.19	...	1.93	...	...
59	Average carrying capacity in tons	Covered wagons	18.79	7.94	7.95	7.40	...	14.10	...	...	...	...
60		Open	10.60	7.43	6.95	6.29	...	15.90	...	3.88	...	...
61	Average load of goods vehicle, loaded and empty, per mile		4.42	3.68	3.71	2.50	...	7.50	...	0.42	...	...
62	Freight ton-mileage per vehicle, in thousands of tons		27	45	42	33	...	...	...	128	...	...
63	Average under repairs or renewals at any one time		32	216	182	1	...	...	...	1	14	...
64	Total value, in thousands of rupees		34.46	...	1,12.47	1.77	1.54	...	1.86	12.4	...	1.48
65	Total value per mile of line open		9.767	...	6.510	2.500	5.938	...	1.030	1.002	...	1.121
66	Grand total value of rolling-stock, in thousands of rupees		47.45	1,69.29	1,69.81	2.72	2.31	9.83	2.56	40	Included with E.B.S. Ry. 3' 4" gauge	4.21
67	Grand total value of rolling-stock per mile of line open		13.966	12.448	9.883	4.060	8.885	12.603	14.322	3.383	...	8.189

DIX 23—concluded.

work done by Rolling-stock.

2' 6"										2' 0"						Progressive No.
1 (b) & (e).	30	9 (h) & (i).	6 (g) & (h).	19	1 (c).	1 (d).	20 (c).	32	33	9 (j).	35	5 (g).	36	37	38	
J. G. E. & R. D.	K. S.	K. K. T. & N. D.	M. D. & T. K.	M. R. W.	M. B.	P. L. L.	P. W. L.	B. P.	T. B.	D. L.	D. H.	G. L.	H. A.	H. S.	J.	

ENGINES.

(In the table below except where separately shown, the Passenger engines are included with Goods and Mixed engines.)

...	...	...	...	5	...	...	...	...	...	...	...	...	...	...	...	1
6	...	...	...	-1	...	...	...	...	...	...	...	...	...	...	...	2
19	24	30	3	4	...	...	...	...	...	...	...	...	...	...	...	3
4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4
23	24	30	6	...	...	...	...	...	...	...	...	...	...	...	...	5
29	24	30	6	...	...	...	...	...	...	...	...	...	...	...	...	6
0.10	0.40	0.23	0.14	0.24	0.09	0.12	0.13	0.15	0.15	1.13	0.33	0.08	0.30	0.20	0.22	7
...	...	...	...	5,189	...	...	...	...	...	...	...	...	...	...	...	8
1,5342	6,797	10,515	16,700	7,330	9,256	6,652	13,129	19,782	...	...	18,723	10,510	16,744	8,908	...	9
...	...	...	...	14	...	...	...	...	...	...	...	...	...	...	...	10
...	...	...	...	20	...	...	...	...	...	...	...	...	...	...	...	11
42	19	45	47	16	25	18	36	54	...	...	38	29	38	24	...	12
2,368	514	791	...	...	659	433	...	...	...	...	...	...	...	...	...	13
1	5	...	...	1	...	1	...	1	1	...	2	2	...	...	...	14
...	6.76	7.08	2.04	94	69	76	...	88	...	...	3.09	...	2.63	65	...	15
...	11,366	5,364	4,652	4,569	2,128	3,081	...	2,640	...	...	6,058	...	7,107	3,250	...	16
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	17
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	18

COACHING STOCK.

(In the table below where the value of coaching stock is not shown it is included with that of Goods.)

56	78	80	11	53	?	8	18	25	14	9	97	63	66	20	23	19
20	14	...	10	...	...	...	...	...	1	-9	2	10	13	...	...	20
76	92	80	21	53	9	8	18	25	15	...	99	73	78	20	22	21
0.02	0.35	0.05	0.05	0.34	0.06	0.04	0.05	0.07	0.15	...	0.48	...	...	...	...	22
0.01	0.25	0.03	0.04	0.39	0.04	0.02	0.05	0.04	...	...	0.54	...	...	...	...	23
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	24
0.19	0.64	0.30	0.23	1.45	0.10	0.14	0.33	0.45	0.45	...	0.80	...	...	...	...	25
0.03	0.30	0.20	0.16	0.38	0.06	0.13	0.03	0.11	0.15	...	0.08	...	...	...	...	26
0.25	1.55	0.60	0.48	2.56	0.28	0.33	0.46	0.75	0.75	...	1.90	0.40	2.11	1.00	0.65	27
16,872	3,710	11,054	20,947	...	11,397	4,441	...	...	...	...	...	...	...	...	...	28
28,121	5,206	18,858	20,946	...	8,566	...	...	...	...	...	...	...	...	...	...	29
35,594	...	37,174	...	...	17,003	...	...	...	...	...	...	...	...	...	...	30
28,328	8,062	27,818	21,667	...	23,515	16,094	...	...	...	...	...	...	...	...	...	31
29,001	8,485	22,814	9,065	...	11,716	6,202	...	...	...	...	...	...	...	...	...	32
27,788	6,086	24,538	17,329	...	15,526	10,129	...	...	...	...	...	...	...	...	...	33
76	18	67	47	...	43	28	...	...	...	...	...	...	...	...	...	34
27	4	14	12	...	12	12	...	...	...	...	...	...	...	...	...	35
...	...	3	...	8	1	...	2	...	...	...	...	...	...	...	...	36
...	4.42	1.85	...	1.40	...	31	...	70	...	...	...	...	...	...	...	37
...	7.442	1.405	...	6.783	...	1,245	...	2,092	...	...	...	...	...	...	...	38

GOODS STOCK.

170	80	84	12	20	4	2	58	20	30	...	44	80	11	4	42	39
105	60	336	12	47	8	14	...	21	18	...	179	55	8	4	29	40
28	...	...	...	...	...	...	2	...	2	...	6	...	...	...	...	41
300	140	431	24	68	12	16	11	41	50	326	19	101	10	...	5	42
...	19	10	12	...	...	...	71	...	...	326	248	236	32	8	76	43
40	-5	2	13	...	...	...	...	...	...	...	5	...	...	...	...	44
...	4	...	...	...	...	...	...	...	...	...	12	...	10	...	...	45
...	8	...	...	...	...	...	...	...	...	...	...	1	...	...	...	46
40	21	...	24	...	...	...	...	...	...	...	-11	...	-10	...	...	47
170	99	74	24	20	4	2	58	20	30	...	49	80	14	4	42	48
145	55	338	24	47	8	14	...	21	18	...	101	55	18	4	29	49
23	4	...	...	...	...	...	2	...	2	...	101	6	...	...	...	50
2	3	...	...	...	...	...	11	...	...	326	6	101	1	...	...	51
340	161	431	48	68	12	16	71	41	50	326	8	237	32	8	76	52
1.13	2.69	8.27	1.09	3.28	0.37	0.65	1.82	1.24	2.50	0.53	4.93	1.30	0.86	0.40	2.38	53
14,768	3,728	4,550	1,961	...	6,283	3,322	...	...	...	...	...	...	...	...	...	54
40	10	12	5	...	17	9	...	...	...	...	...	...	...	...	...	55
7.44	3.75	4.50	6.45	3.25	5.00	6.98	3.16	2.75	...	...	...	2.13	2.75	2.75	...	56
6.34	2.75	1.33	5.97	3.25	5.06	4.06	...	2.15	...	...	...	2.60	2.50	2.50	...	57
14.68	8.00	8.64	9.50	4.75	9.00	9.04	4.81	5.00	4.00	...	...	5.13	5.00	5.00	...	58
12.50	6.00	3.43	10.00	7.00	11.99	7.38	...	5.00	4.00	...	...	4.16	5.00	5.00	...	59
2.83	2.80	...	...	...	4.18	3.48	...	...	...	...	...	...	...	...	...	60
40	10	8	7	...	26	12	...	...	...	...	...	...	...	...	...	61
...	...	11	...	10	...	...	4	...	...	...	...	...	...	...	...	62
...	3.53	4.83	2.68	1.22	...	41	...	61	...	...	3.75	...	3.90	1.03	...	63
...	6.028	3.660	6.102	5.869	1.897	1.688	...	1.836	...	...	7.358	...	10.532	5.160	...	64
25.76	14.76	19.76	4.72	3.58	1.30	1.48	1.42	3.19	1.60	...	6.84	5.56	6.53	1.68	2.09	65
8,580	24,832	10,424	10,727	16,953	4,062	5,920	3,641	6,636	8,000	...	13,412	3,088	17,649	8,400	6,531	66
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	67

APPENDIX 24.

Rolling-stock fitted with automatic brakes at the close of the calendar year 1906.

NUMBER.		Gauge.	RAILWAY SYSTEM. (Vide Appendix 38.)	LOCOMOTIVES.			COACHING VEHICLES INCLUDING ALL BRAKE-VANS.				GOODS VEHICLES, EXCLUDING CRANES.			
Main head.	Sub-head.			Fitted.	Not fitted.	Proportion per cent. of fitted to total.	Braked.	Piped.	Not fitted.	Proportion per cent. of fitted to total.	Braked.	Piped.	Not fitted.	Proportion per cent. of fitted to total.
1	(a)	2' 6"	Bengal-Nagpur	176	115	60.48	809	2	145	84.83	1,259	574	5,788	24.05
2	(a) to (f)		Bombay, Baroda and Central India	185	35	84.09	508	4	134	79.26	2	49	5,075	0.99
3	(a)		Eastern Bengal State	143	57	71.50	518	61	140	80.53	...	12	4,040	0.30
4	...		East Indian	495	451	52.33	1,618	80	797	68.06	414	78	18,252	2.62
5	(a) to (f)		Great Indian Peninsula	560	302	64.97	1,783	6	586	75.33	...	167	11,942	1.38
	(f)		Indian Midland											
6	(a) to (d)		Madras	163	109	59.93	1,012	15	202	83.56	250	15	4,638	5.40
8	(a) & (b)		Nizam's Guaranteed State . . . . .	...	61	...	57	3	129	31.75	...	...	1,056	...
9	(a) to (g)		North Western State	808	12	98.54	2,254	78	220	91.38	2,207	117	10,476	18.16
10	(a) & (b)		Oudh and Rohilkhand State	152	53	74.15	721	49	90	89.53	29	13	5,524	0.75
11	...	3' 6"	Assam-Bengal	78	9	89.65	251	4	11	95.86	305	7	1,689	15.59
12	...		Bengal and North-Western	96	175	35.42	470	2	656	41.84	...	...	6,302	...
13	...		Bengal Doons . . . . .	...	10	...	...	3	60	4.76	...	...	345	...
14	...		Bhavnagar-Gondal-Junagad- Porbandar . . . . .	...	37	...	...	...	255	...	...	...	1,046	...
15	...		Burma	152	107	58.69	493	33	512	50.67	296	14	4,920	5.93
16	...		Deoghur . . . . .	...	2	...	...	...	12	...	...	...	10	...
17	...		Dibrui-Sadiya . . . . .	...	26	...	...	...	89	...	...	...	1,092	...
18	(b) & (c)		Eastern Bengal State	121	29	80.67	427	40	197	70.33	...	2	3,763	0.05
19	(c)		Hyderabad-Godavari Valley . . . . .	...	55	...	3	...	161	1.83	...	...	895	...
20	...		Jodhpur-Bikaner . . . . .	...	48	...	...	2	215	0.92	...	...	992	...
21	...	4' 6"	Morvi . . . . .	...	5	...	...	2	53	3.64	...	...	70	...
22	(e) & (f)		Nilgiri and Shoranur-Cochin	6	12	33.33	12	...	45	21.05	22	...	149	12.87
23	(g) to (m)		Rajputana-Malwa	76	372	16.96	174	79	1,450	14.86	...	...	7,980	...
24	(a) & (b)		Rohilkhand and Kumaon	18	30	37.50	51	14	162	28.63	...	...	1,371	...
25	...		South Indian	93	155	37.50	258	2	871	22.99	...	...	3,883	...
26	...		Southern Mahratta	48	189	20.25	118	3	935	11.46	...	...	5,341	...
27	...		Udaipur-Chitor . . . . .	...	3	...	...	...	26	...	...	...	35	...
28	...		Baraset-Basirhat Light . . . . .	...	3	...	...	...	23	...	...	...	25	...
29	...		Barsi Light	3	4	42.86	26	...	7	78.79	1	...	92	1.07
30	...		Bukhtiarpore-Bihar Light . . . . .	...	3	...	...	...	19	...	...	...	34	...
31	(d)	5' 6"	Cooch Behar including 2' 6" gauge branches of Eastern Bengal State Railway . . . . .	...	15	...	...	...	63	...	...	...	280	...
32	...		Cutch . . . . .	...	3	...	...	...	3	...	...	...	18	...
33	(n) & (o)		Guekwar's Dabhoi and Rajpipla . . . . .	...	11	...	...	...	51	...	...	...	210	...
34	(b) to (e)		Jubbulpore-Gondia, Mour- bhanj, Parlakimedi Light and Raipur-Dhamtari	22	13	62.86	54	...	39	58.06	265	...	103	72.01
35	...		Kalka-Simla	24	...	100.00	92	...	...	100.00	89	61	...	100.00
36	(h) & (i)		Khushalgarh-Kohat-Thal and Nowshera-Durgai . . . . .	...	30	...	...	...	80	...	...	...	431	...
37	(g) & (h)		Morappur-Dharmapuri and Tirupattur-Krishnagiri . . . . .	...	6	...	...	...	21	...	...	...	48	...
38	...		Morvi . . . . .	...	5	...	...	...	53	...	...	...	68	...
39	(c)		Powayan Light . . . . .	...	5	...	...	...	18	...	...	...	71	...
40	...		Tarakeshwar-Magra Light . . . . .	...	5	...	...	...	25	...	...	...	41	...
41	...	6' 6"	Tezporo-Balipara Light . . . . .	...	3	...	...	...	15	...	...	...	50	...
42	(j)		Dandot Light . . . . .	...	7	...	...	...	...	...	...	...	326	...
43	...		Darjeeling-Himalayan . . . . .	...	17	...	...	...	90	...	...	...	254	...
44	(p)		Gwalior Light . . . . .	...	15	...	...	...	73	...	...	...	237	...
45	...		Howrah-Amta Light . . . . .	...	11	...	...	...	78	...	...	...	82	...
46	...		Howrah-Sheakhala Light . . . . .	...	4	...	...	...	20	...	...	...	8	...
47	...		Jorhat . . . . .	...	7	...	...	...	22	...	...	...	76	...
48	...		...	...	...	...	...	...	...	...	...	...	...	...
49	...		...	...	...	...	...	...	...	...	...	...	...	...
50	...		...	...	...	...	...	...	...	...	...	...	...	...
51	...		...	...	...	...	...	...	...	...	...	...	...	...
Total				3,419	2,626	56.56	11,709	482	8,862	87.91	5,149	1,109	109,078	5.43

APPENDIX 25.

Rolling-stock lighted by gas and electricity at the close of the calendar year 1906.

NUMBER.		Gauge.	RAILWAY SYSTEM. (Vide Appendix 38.)	Number of coaching vehicles fitted for light- ing with			Number of coaching vehicles not fitted.	Pro- portion per cent. of fitted to total.	REMARKS.
Main head.	Sub-head.			Gas.	Elec- tricity.	Total.			
1	(a)	5' 6"	Bengal-Nagpur	755	2	757	148	83.64	
2	(a) to (f)		Bombay, Baroda and Central India	405	9	414	7	98.34	
3	(a)		Eastern Bengal State	486	2	488	224	68.54	
4	...		East Indian	1,485	6	1,491	192	88.59	
5	(a) to (f)		Great Indian Peninsula	1,370	60	1,430	69	95.46	
			Indian Midland						
6	(a) to (d)		Madras	1,032	...	1,032	164	86.29	
8	(a) & (b)		Nizam's Guaranteed State	121	...	121	60	66.85	
9	(a) to (g)		North Western State	2,002	3	2,005	284	87.59	
10	(a) & (b)		Oudh and Rohilkhand State	688	7	695	165	80.61	
11	...	3' 3 1/2"	Assam-Bengal	245	...	245	...	100.00	
12	...		Bengal and North-Western . . . . .	...	189	189	939	16.76	
13	...		Bengal Doonars . . . . .	...	...	...	63	...	
14	...		Bhavnagar-Gondal-Junagad-Portbandar . . . . .	...	23	23	232	9.02	
15	...		Burma . . . . .	...	26	26	944	2.68	
16	...		Deoghur . . . . .	...	...	...	12	...	
17	...		Dibru-Sadiya . . . . .	...	...	...	89	...	
3	(b) & (c)		Eastern Bengal State	478	1	479	180	72.68	
8	(c)		Hyderabad-Godavari Valley	114	...	114	50	69.51	
18	...		Jodhpur-Bikaner . . . . .	...	112	112	90	53.08	
19	...	2' 6"	Morvi . . . . .	...	...	...	55	...	
6	(e) & (f)		Nilgiri and Shoranur-Cochin . . . . .	...	...	...	57	...	
2	(g) to (m)		Rajputana-Malwa . . . . .	...	815	815	888	47.86	
20	(a) & (b)		Rohilkhand and Kumaon . . . . .	...	58	58	169	25.55	
21	...		South Indian . . . . .	...	106	106	996	10.47	
22	...		Southern Mahratta	971	1	972	51	94.78	
23	...		Udaipur-Chitor . . . . .	...	...	...	26	...	
24	...		Barasot-Basirhat Light . . . . .	...	...	...	23	...	
25	...		Barsi Light . . . . .	...	33	23	7	76.7	
26	...		Bukhtiarpore-Bohar Light . . . . .	...	...	...	19	...	
3	(d)	2' 0"	Cooch Behar including 2' 6" gauge branches of Eastern Bengal State Railway . . . . .	...	...	...	63	...	
27	...		Cutch . . . . .	...	...	...	3	...	
2	(n) & (o)		Gaekwar's Dabhoi and Rajpipla . . . . .	...	...	...	51	...	
1	(b) to (e)		Jubbulpore-Gondia, Mourbhauj, Parlakimedi Light and Raipur-Dhamtari	52	...	52	29	57.14	
30	...		Kalka-Simla . . . . .	...	92	92	...	100.00	
9	(h) & (i)		Khushalgarh-Kobat-Thal and Nowshera Durgai . . . . .	...	...	...	80	...	
6	(g) & (h)		Morappur-Dharmapuri and Tirupattur-Krishnagiri . . . . .	...	...	...	21	...	
19	...		Morvi . . . . .	...	...	...	53	...	
20	(c)		Powayan Light . . . . .	...	...	...	18	...	
32	...		Tarakeshwar-Magra Light . . . . .	...	...	...	25	...	
33	...		Tezporo-Balipara Light . . . . .	...	...	...	15	...	
9	(j)	2' 0"	Dandot Light . . . . .	...	...	...	...	...
35	...		Darjeeling-Himalayan . . . . .	...	...	...	99	...	
5	(k)		Gwalior Light . . . . .	...	...	...	73	...	
36	...		Howrah-Amra Light . . . . .	...	...	...	78	...	
37	...		Howrah-Sheakhala Light . . . . .	...	...	...	20	...	
38	...		Jorhat . . . . .	...	...	...	22	...	
TOTAL				10,204	1,535	11,739	6,784	68.88	

APPENDIX 25-A.

Statement showing the number of trains provided with means of communication throughout between passengers and guards and drivers on the 31st December 1906.

NUMBER.		Gauge.	RAILWAY SYSTEM (vide Appendix 38).	Particulars.	Mail.	Passen- gers.	Mixed.	Total.	REMARKS.
Main head.	Sub-head.								
3	(a)	5' 6"	Eastern Bengal State	Total number of trains run ...	8	80	55	143	Vacuum brake alarm communication.
				Total number of trains fitted with communication ...	8	39	5	52	
5	(a) to (f)		Great Indian Peninsula	Total number of trains run ...	12	39	73	124	Chain Pass; communication, English pattern.
				Total number of trains fitted with communication ..	1	...	...	1	
3	(b) & (c)	3' 3 1/2"	Eastern Bengal State	Total number of trains run ...	4	7	51	62	Vacuum brake alarm communication.
				Total number of trains fitted with communication ..	4	3	...	7	
2	(g) to (m)		Rajputana-Malwa	Total number of trains run ...	8	13	55	76	Electric communication.
				Total number of trains fitted with communication ..	6	5	...	11	
21	...		South Indian	Total number of trains run ..	8	30	74	112	
				Total number of trains fitted with communication...	4	...	...	4	

APPENDIX 25-B.

Statement showing the number of carriages provided with means of communication between passengers and guards and drivers on the 31st December 1906.

NUMBER.		Gauge.	RAILWAY SYSTEM (vide Appendix 38.)	Particulars.	1st.	2nd.	Inter.	3rd.	All other car- riages including composites.	TOTAL.	REMARKS.
Main head.	Sub-head.										
1	(a)	5' 6"	Bengal-Nagpur	Total number of carriages ...	26	29	26	309	476	956	Edward King's patent stop train alarm signals.
				Total number of carriages fitted with communication.	1	...	...	...	1	2	
2	(a) to (f)		Bombay, Baroda and Central India.	Total number of carriages ...	3	33	17	299	294	646	English chain system in connection with automatic vacuum brake.
				Total number of carriages fitted with communication.	20	9	...	...	19	48	
3	(a)		Eastern Bengal State.	Total number of carriages ...	15	16	45	224	419	719	Vacuum automatic brake alarm communication. Fourteen carriages have been provided with Edward King's stop train alarm signals.
				Total number of carriages fitted with communication.	9	9	16	58	78	170	
4	...		East Indian	Total number of carriages ...	89	77	88	971	1,270	2,495	Bamber's patent alarm apparatus.
				Total number of carriages fitted with communication.	26	39	...	...	85	150	
5	(a) to (f)		Great Indian Peninsula.	Total number of carriages ...	98	145	...	872	1,260	2,375	Chain Pass; communication, English pattern.
				Total number of carriages fitted with communication.	31	...	...	6	21	48	
6	(a) to (d)		Madras	Total number of carriages ...	38	79	4	558	550	1,229	Automatic vacuum brake communication.
				Total number of carriages fitted with communication.	1	...	...	...	...	1	
9	(a) to (g)		North Western State.	Total number of carriages ...	82	91	133	972	1,274	2,552	Vacuum brake communication, King's device.
				Total number of carriages fitted with communication.	64	...	5	15	136	220	
10	(a) & (b)		Oudh and Rohilkhand State.	Total number of carriages ...	40	33	39	323	425	860	Vacuum brake system.
				Total number of carriages fitted with communication.	12	20	...	26	72	130	
3	(b) & (c)		Eastern Bengal State.	Total number of carriages ...	18	19	47	278	302	664	Vacuum automatic brake alarm communication. Four carriages have been provided with Edward King's stop train alarm signals.
				Total number of carriages fitted with communication.	12	13	13	62	45	145	
18	...		Jodhpur-Bikaner	Total number of carriages ...	7	6	17	94	93	217	Electric communication.
				Total number of carriages fitted with communication.	7	6	17	94	93	217	
2	(g) to (m)	3' 3 1/2"	Rajputana-Malwa	Total number of carriages ...	108	87	51	859	598	1,708	Electric communication.
				Total number of carriages fitted with communication.	108	40	45	483	300	976	
				Total number of carriages ...	15	28	...	672	416	1,181	

APPENDIX 26.

Railways on which points and signals were interlocked and on which block instruments were used for train signalling at the close of the calendar year 1906.

NUMBER.		Gauge.	RAILWAY SYSTEM. (Vide Appendix 38.)	Total number of stations on railway.	STATIONS AT WHICH POINTS AND SIGNALS WERE INTERLOCKED.		STATIONS AT WHICH BLOCK INSTRUMENTS WERE USED FOR TRAIN SIGNALLING.		
Main head.	Sub-head.				No.	Name of system of interlocking.	No.	Name of block instrument.	
1	(a)	5' 6"	Bengal-Nagpur	240	101	81 List and Morse's . 20 Experimental .	16	2 Webb and Thomson's. 2 Dutton's. 12 Theobald's Train Key.	
2	(a) to (f)		Bombay, Baroda and Central India	138	33	25 Mackenzie and Holland's. 8 Experimental .	85	59 Preece's single wire semaphore. Does not give out a token or tablet. 26 Experimental.	
3	(a)		Eastern Bengal State	129	35	24 Ordinary double line interlocking. 11 Experimental .	22	Pryce and Ferreira's. Token not necessary.	
4	...		East Indian	414	217	110 English system . 106 Dutton's .	255	76 Pryce and Ferreira's. Token not necessary. 76 Neal's Patent Voucher. 37 Tyer's Tablet. 59 East Indian Railway double line block instrument.	
5	(a) & (b)		Great Indian Peninsula	264	68	1 Experimental . 47 English system .	264	8 East Indian Railway tablet. 806 Preece's. Does not give out a token or tablet. At some of these stations two kinds of instruments are used.	
5	(c) to (f)		Indian Midland	148	17	3 Experimental . 11 Wrench's 5 English system . 1 Experimental .	46	65 Neal's. Preece's. Does not give out a token or tablet.	
6	(a) to (d)		Madras	318	61	37 List and Morse's .	220	84 Winter's Block with starting semaphores. Does not give out a token or tablet. 16 Winter's Block without starting semaphores. Does not give out a token or tablet.	
8	(a) & (b)		Nizam's Guaranteed State	45	2	24 Experimental 1 List and Morse's 1 Dutton's	...	120 Theobald's Train Key.	
9	(a) to (g)		North Western State	623	353	293 List and Morse's 37 Tappet 20 Key locking 3 Experimental .	37	11 Tyer's Tablet. 28 Tyer's double line block instruments.	
10	...		Oudh and Rohilkhand State	101	116	103 List and Morse's .	2	Experimental.	
11	...		Assam-Bengal	126	...	13 Experimental .	...	...
12	...		Bengal and North-Western	287	...	...	...	...
13	...		Bengal Doonars	29	...	...	...	...
14	...		Bhavnagar-Gondal-Junagad-Forbandar	64	2	Experimental .	...	...
15	...		Burma	236	24	12 List and Morse's .	13	7 Sykes'. 2 Tyer's Tablet. 2 Neal's. 2 Theobald's Train Key.	
16	...	3' 3 3/4"	Dooghur	1	...	13 Experimental .	...	...
17	...		Dibru-Sadiya	18	...	...	...	...
3	(b) to (d)		Eastern Bengal State	145	21	20 List and Morse's .	20	Tyer's Tablets	
8	(c)		Hyderabad-Godavari Valley	47	42	1 Experimental List and Morse's .	...	...
18	...		Jodhpur-Bikaner	85	...	...	...	...
19	...		Morvi	8	...	...	...	...
6	(e) & (f)		Nilgiri and Shoranur-Cochin	32	1	Experimental .	12	6 Winter's Block with starting semaphores. Does not give out a token or tablet. 6 Theobald's Train Key.	
2	(g) to (m)		Rajputana-Malwa	295	101	87 Sydney Jones' .	45	42 Tyer's Tablet.	
20	(a) & (b)		Rohilkund and Kumaon	61	4	14 Experimental .	...	3 Experimental.
21	...		South Indian	243	35	25 List and Morse's 7 Dutton's 3 Experimental .	25	24 Winter's Block and Ticket issuing. 1 Experimental.	
22	...		Southern Mahratta	244	1	Experimental .	106	96 Winter's. Does not give out a token or tablet. 6 Roberts' Key Staff. 4 Theobald's Train Key.	
23	...		Udaipur-Chitor	7	...	...	...	...
24	...		Baraset-Basirhat Light	11	...	...	...	...
25	...		Barsi Light	15	...	...	...	...
26	...		Bukhtiarpore-Bihar Light	7	...	...	...	...
27	...		Cutch	2	...	...	...	...
2	(n) & (o)	2' 6"	Gaekwar's Dabhoi and Rajpura	32	1	Country made .	...	...
1	(b) to (e)		Jubbulpore-Gondia, Mourbhauj, Parlakimedi Light and Raipur-Dhamtari	54	...	...	...	...
9	(h) & (i)		Khushalgarh-Kohat-Thal and Nowshera-Durgai	21	...	...	...	...
30	...		Kalka-Simla	21	...	...	...	...
6	(g) & (h)		Morappur-Dharmapuri and Tirupattur-Krishnagiri	10	...	...	...	...
19	...		Morvi	2	...	...	...	...
20	(c)		Powayan Light	8	...	...	...	...
32	...		Tarakeshwar-Magra Light	16	...	...	...	...
38	...		Tezpore-Balipara Light	8	...	...	...	...
35	...		2' 0"	Darjeeling-Himalayan	11
5	(g)			Gwalior Light	23
36	...			Howrah-Amta Light	18
37	...			Howrah-Sheekhala Light	12
38	...		Jorhat	8	...	...	...	...
Total				4,717	1,285	...	1,168	...	

APPENDIX 27.

Coal and wood fuel consumed by each railway system and price paid per ton during the calendar years 1902 to 1906.

Number.	Ry. system, vide App. 38.	Calendar year.	SOURCES OF SUPPLY.			DESCRIPTION OF FUEL WITH ACTUAL QUANTITY CONSUMED AND COST PER TON.									CONSUMPTION IN LBS.				REMARKS.
			NAME. (The name of the sources of supply is for coal only. Wood was supplied from various sources.)	AVERAGE DISTANCE CARRIED IN MILES. (The distance is reckoned either from the sources of supply or from the places of delivery to several storages.)		FOREIGN COAL.			INDIAN COAL.			WOOD.			(Calculated on the actual quantity of coal, and wood reduced in terms of coal at the rate of 1 ton of coal to 2½ tons of wood.)				
						Quantity in tons.	Cost per ton.		Quantity in tons.	Cost per ton.		Quantity in tons.	Cost per ton.		Per train mile.	Per engine mile.	Per 1,000 freight ton miles.	Per 1,000 gross ton miles.	
							In-cluding freight.	Ex-cluding freight.		In-cluding freight.	Ex-cluding freight.		In-cluding freight.	Ex-cluding freight.					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
							Rs.	Rs.		Rs.	Rs.		Rs.	Rs.					
	B. C.	{ 1902 1903 1904 1905	Bengal.	{ 162 162 162	Amalgamated with the Eastern Bengal State railway.				8,466 10,623 9,789	6.27 6.00 5.67	3.00 3.00 3.00	...	...	...	51.47 51.10 51.24	41.24 41.10 40.35	1,368.09 1,278.70 1,113.51	201.02 256.13 186.82	
1 a)	B. N.	{ 1902 1903 1904 1905 1906	Bengal and Umaria	{ 321 283 228 219 227					113,180 134,066 148,725 177,960 199,707	4.29 3.71 5.52 5.16 5.40	2.48 2.43 2.58 2.34 2.43	103 206 219 237 163	5.60 4.20 ...	5.60	59.84 65.95 67.95 71.81 73.55	53.37 57.33 58.65 61.15 61.09	759.43 775.46 754.68 648.19 624.02	178.58 199.42 200.80 198.31 192.58	
1 b)	J. G. E.	{ 1902 1903 1904 1905 1906	Bengal	{ 603 617 620 451					191 3,165 5,746 9,329	7.68 10.31 10.18 7.11	2.12 2.46 2.18 2.43	...	...	...	64.35 56.20 54.31 66.15	60.52 47.63 45.53 51.83	1,135.88 1,178.53 983.05 1,422.65	393.30 344.98 300.75 380.13	
1 c)	M. B.	{ 1905 1906	Bengal	{ 188 188					417 347	4.69 4.84	2.28 2.43	...	...	...	24.01 32.97	23.63 27.99	1,275.94 1,852.78	440.05 396.27	
1 d)	P. L. L.	{ 1902 1903 1904 1905 1906	Bengal	{ 603 567 495 495 495					350 362 361 354 296	7.96 7.40 8.70 8.52 8.67	2.37 2.12 2.46 2.28 2.43	...	...	...	41.56 44.43 44.19 43.24 35.56	39.06 42.06 42.38 40.30 33.22	5,545.54 3,873.00 2,685.67 2,375.43	664.51 627.00 512.19 510.78	
1 e)	R. D.	{ 1902 1903 1904 1905 1906	Bengal	{ 480 463 443 442 442					554 683 785 856 780	6.41 6.07 8.12 7.95 8.10	2.37 2.12 2.46 2.28 2.43	...	...	...	23.31 26.61 29.43 30.89 28.99	22.75 26.35 29.08 30.41 27.72	1,966.15 1,486.37 1,168.36 1,091.26 1,126.17	378.98 437.75 403.00 369.67 329.42	
2 a)	B. & C. I.	{ 1902 1903 1904 1905 1906	England, Bengal and Singaroni.	{ 128 121 129 148 115	105	7,477 10,384 13,545 12,621 28,692	20.00 19.33 19.62 16.87 19.37		65,559 63,172 67,666 75,769 64,635	15.98 14.16 12.92 12.73 12.95	...	2,063 2,226 2,344 2,494 2,491	3.27 3.00 3.00 3.06 3.27	...	58.11 57.58 59.27 57.81 57.18	48.99 48.16 49.22 48.43 47.42	543.66 514.46 336.53 514.60 478.62	154.30 148.09 152.36 149.83 112.15	
2 b)	G. D. & R.	{ 1902 1903 1904 1905 1906	Bengal.	{					1,039 1,417 1,246 1,384 1,833	...	...	21 70 83 207 79	...	...	24.18 25.50 25.30 27.05 28.91	24.02 25.17 25.12 26.90 28.80	...	...
3 a)	E. B. S.	{ 1902 1903 1904 1905 1906	Bengal	{ 167 156 162 160 188					67,891 69,260 69,974 90,396 119,022	6.10 5.65 5.02 4.82 5.81	3.48 2.81 2.39 2.48 2.81	...	...	...	60.86 72.02 72.78 73.38 80.20	49.57 50.20 49.11 53.49 51.74	889.42 919.95 863.33 975.41 998.93	209.53 213.73 206.85 232.28 240.46	
3 b)	E. B. S.	{ 1902 1903 1904 1905 1906	Bengal and Assam.	{ 291 280 285 281 290					42,838 47,217 49,991 48,662 57,527	9.82 6.32 6.09 6.06 6.33	5.14 3.78 3.75 4.32 3.58	...	...	...	42.82 41.07 45.84 46.84 48.90	34.31 35.65 36.77 36.52 38.04	898.88 814.86 872.27 805.30 857.53	235.43 239.44 231.02 227.78 246.92	
3 c)	E. B. S.	{ 1902 1903 1904 1905 1906	Bengal and Assam.	{ 291 280 285 281 290					42,838 47,217 49,991 48,662 57,527	9.82 6.32 6.09 6.06 6.33	5.14 3.78 3.75 4.32 3.58	...	...	...	42.82 41.07 45.84 46.84 48.90	34.31 35.65 36.77 36.52 38.04	898.88 814.86 872.27 805.30 857.53	235.43 239.44 231.02 227.78 246.92	
(d)	O. B.	{ 1902 1903 1904 1905 1906	Bengal and Assam.	{ 407 85 72 75 71					785 960 1,271 587 856	10.69 9.86 9.45 9.77 9.62	4.18 9.04 9.40 9.11 9.50	...	...	...	29.95 23.76 26.86 17.53 20.40	19.13 21.20 30.57 14.61 17.21	...	...
4	E. L.	{ 1902 1903 1904 1905 1906	Bengal and Umaria.	{ 260 256 244 245 257					481,247 476,581 468,271 505,916 532,758	4.18 4.19 4.05 4.01 4.04	1.96 2.00 1.97 1.92 1.85	...	...	...	63.92 65.75 66.47 69.75 68.79	50.76 51.97 51.66 52.07 51.07	508.10 457.12 406.83 431.67 426.80	161.42 151.16 187.59 145.77 141.43	

APPENDIX 27—continued.

Coal and wood fuel consumed by each railway system and price paid per ton during the calendar years 1902 to 1906—contd.

Number.	Ry. system, vide App. 88.	Calendar year.	SOURCES OF SUPPLY.			DESCRIPTION OF FUEL WITH ACTUAL QUANTITY CONSUMED AND COST PER TON.										CONSUMPTION IN LBS.				REMARKS.				
			NAME. (The name of the source of supply is for coal only. Wood was supplied from various sources.)	AVERAGE DISTANCE CARRIED IN MILES. (The distance is reckoned either from the sources of supply or from the places of delivery to several storages.)	Quantity in tons.	FOREIGN COAL.		INDIAN COAL.		WOOD.		Quantity in tons.	In-cluding freight.	Ex-cluding freight.	Quantity in tons.	In-cluding freight.	Ex-cluding freight.	Per train mile.	Per engine mile.		Per 1,000 freight ton miles.	Per 1,000 gross ton miles.		
						Coal	Wood	In-cluding freight.	Ex-cluding freight.	In-cluding freight.	Ex-cluding freight.												In-cluding freight.	Ex-cluding freight.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20					
5 (a)	G. I. P.	{ 1902 1903 1904 1905 1906 }	England, Bengal, Singareni, Umaria, Nerbudda and Warora.	{ 294 327 304 304 304 }	...	303	...	12.87	425,936	8.38	5.98	4,515	...	3.81	68.79	58.11	719.69	193.63						
				{ 327 304 304 304 304 }	...	...	...	...	456,794	8.47	6.07	4,439	...	3.91	68.43	59.65	708.03	206.32		
				{ 304 304 304 304 304 }	...	202	...	18.54	463,917	8.49	6.45	5,117	...	3.58	68.91	60.50	776.00	205.09						
				{ 304 304 304 304 304 }	...	320	...	16.64	453,414	9.25	7.37	4,896	...	3.51	67.43	59.09	755.75	200.52						
				{ 304 304 304 304 304 }	...	635	...	17.91	477,265	9.59	6.75	4,456	...	4.00	68.43	59.73	751.29	195.91						
5 (b)	G. I.	{ 1902 1903 1904 1905 1906 }	Bengal and Mohani.	{ 750 535 535 535 535 }	...	...	...	...	1,400	...	...	...	...	...	35.03	35.03	...	...				
				{ 750 535 535 535 535 }	...	...	...	...	1,617	16.00	2.75	11	...	...	38.30	36.00	...	...				
				{ 535 535 535 535 535 }	...	...	...	...	1,990	13.28	3.25	24	...	...	36.13	34.10	...	...				
				{ 535 535 535 535 535 }	...	...	...	...	2,553	13.62	3.75	27	...	...	41.73	38.81	...	...				
				{ 535 535 535 535 535 }	...	...	...	...	2,848	13.37	3.75	25	...	...	43.86	40.45	...	...	(a) Reduced to Rs. 10.12 per ton from 15th November 1906.
6 (a) to (d)	M.	{ 1902 1903 1904 1905 1906 }	England, Bengal and Singareni.	{ 313 333 191 352 350 }	14 27 38 24 36	...	...	...	97,546	10.82	5.25	108,529	4.97	4.68	68.64	57.65	974.72	227.03			
				{ 333 191 352 350 350 }	...	...	...	...	112,047	10.29	5.12	96,577	4.97	4.42	73.02	60.89	1,069.81	240.40		
				{ 191 352 350 350 350 }	...	...	...	...	130,755	10.82	8.95	59,148	4.81	4.01	70.78	58.69	946.28	224.48		
				{ 352 350 350 350 350 }	...	...	...	...	156,312	10.23	5.15	42,059	4.48	3.98	74.96	63.85	874.82	221.09		
				{ 350 350 350 350 350 }	...	...	...	...	157,081	10.52	5.70	31,115	4.84	4.09	74.98	63.74	895.19	228.97		
6 (a) to (h)	N. S. C. M. & T. K.	{ 1902 1903 1904 1905 1906 }	England, Bengal and Singareni.	{ 241 688 148 207 ...	16 18 21 24 ...	1,875 1,642 2,430 2,517 2,580	31.67 29.00 25.35 24.38 25.13	*27.57 *29.17 *22.54 20.58 21.33	...	...	...	3,315 5,889 5,116 4,502 6,168	4.43 4.61 4.48 4.62 ...	4.09 4.75 4.04 4.12 ...	72.38 61.42 61.30 60.50 49.85	66.69 54.08 54.18 52.45 44.29	4,399.75 2,409.43 2,605.43 2,637.03 3,151.6	654.46 309.85 423.49 424.76 455.45	* Including sea freight from England.		
				{ 241 688 148 207					
				{ 688 148 207				
				{ 148 207				
				{ 207				
8 (a) to (b)	N. G. S.	{ 1902 1903 1904 1905 1906 }	Singareni	{ 103 131 132 81 86 }	...	...	...	...	30,215	...	4.66	...	...	...	67.00	56.75	567.37	173.81	
				{ 131 132 81 86 ...	...	...	...	...	26,967	6.27	4.50	250	5.98	3.25	61.02	51.91	547.72	160.95		
				{ 132 81 86 ...	...	...	...	...	26,276	6.27	4.50	203	5.83	1.14	61.08	50.87	533.22	158.74		
				{ 81 86 ...	...	...	...	...	24,900	5.81	4.68	...	...	...	57.30	43.19	514.05	154.58	
				{ 86 ...	...	...	...	...	26,919	5.59	4.69	...	...	...	56.24	47.98	504.29	153.51	† Of Bengal coal only.
8 (c)	H. G. V.	{ 1902 1903 1904 1905 1906 }	Singareni	{ 341 847 347 291 266 }	...	...	...	...	14,442	6.96	4.86	...	...	...	40.12	36.11	1,026.21	219.62	
				{ 847 347 291 266 ...	...	...	...	...	14,610	10.00	6.62	265	4.60	...	30.66	35.55	1,031.64	217.01		
				{ 347 291 266 ...	...	...	...	...	14,309	9.82	5.58	205	10.52	5.56	40.86	36.85	986.72	205.73		
				{ 291 266 ...	...	...	...	...	16,646	8.90	4.76	...	...	...	39.50	35.70	825.63	201.96	
				{ 266 ...	...	...	...	...	15,683	7.83	4.81	...	...	...	37.59	33.68	753.84	194.36	
9 (a) to (g)	N. W.	{ 1902 1903 1904 1905 1906 }	England, Bengal, Dandot, Bhaganwala and Khost.	{ 1834 1838 1833 1838 1838 }	...	7,206 3,786 1,650 2,773 2,872	...	20.61 19.00 11 11 11	248,279 258,111 370,454 431,520 476,877	...	...	122,323 216,097 163,151 76,336 77,122	...	...	52.84 52.72 57.16 59.82 62.32	46.36 46.47 50.12 52.16 53.07	597.84 557.78 481.27 541.06 551.86	160.45 155.74 156.96 172.02 178.64		
				{ 1838 1833 1838 1838 1838 }					
				{ 1833 1838 1838 1838 1838 }					
				{ 1838 1838 1838 1838 1838 }					
				{ 1838 1838 1838 1838 1838 }					
9 (h) to (i)	K. K. T. & N. D.	{ 1902 1903 1904 1905 1906 }	Bengal and Dandot.	{ 120 120 120 156 249 }	...	...	...	...	1,235 2,758 2,731 2,726 3,548	...	...	160 192 270 132 74	...	...	26.75 25.16 21.34 19.72 19.43	22.82 21.45 17.88 16.68 16.17	2,072.38 2,624.45 1,862.21 1,243.44 1,763.94	318.41 495.46 335.28 301.98 337.51	
				{ 120 120 120 156 249 }	...	...	...	...	...	...	...	...	...	...	...	...	...	...
				{ 120 120 120 156 249 }	...	...	...	...	...	...	...	...	...	...	...	...	...	...
				{ 120 120 120 156 249 }	...	...	...	...	...	...	...	...	...	...	...	...	...	...
				{ 120 120 120 156 249 }	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10 (a) to (b)	O. & B.	{ 1902 1903 1904 1905 1906 }	Bengal	{ 674 595 603 603 603 }	...	...	...	...	98,775 108,040 110,278 131,445 142,729	9.38 7.76 7.46 7.83 8.26	2.53 2.15 2.13 2.13 2.47	...	...	...	51.68 54.81 55.39 59.17 61.09	44.36 46.99 47.68 50.26 52.24	819.01 849.59 791.59 919.40 929.53	172.21 177.85 179.43 192.35 204.73	
				{ 595 603 603 603 603 }	...	...	...	...	...	...	...	...	...	...	...	...	...	...
				{ 603 603 603 603 603 }	...	...	...	...	...	...	...	...	...	...	...	...	...	...
				{ 603 603 603 603 603 }	...	...	...	...	...	...	...	...	...	...	...	...	...	...
				{ 603 603 603 603 603 }	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11	A. B.	{ 1902 1903 1904 1905 1906 }	Bengal and Assam.	{ 105 120 120 156 249 }	...	...	...	...	18,661 15,682 22,837 31,778 37,135	9.25 7.92 7.64 7.43 7.41	...	2,715 1,918 ...	1.57 1.45 ...	...	48.52 43.06 43.89 47.94 52.12	37.21 36.78 36.03 38.93 39.81	1,011.99 903.35 913.94 1,063.16 683.03	223.78 245.24 235.17 265.00 251.10	
				{ 105 120 120 156 249 }	...	...	...	...	...	...	...	...	...	...	...	...	...	...
				{ 120 120 156 249 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
				{ 120 156 249 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
				{ 249 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12	B. & N. W.	{ 1902 1903 1904 1905 1906 }	Bengal.	{ 252 250 248 280 289 }	25 25 18 18 71	...	...	...	71,240 87,652 97,638 97,424 111,475	6.11 5.61 5.51 5.55 5.07	3.04 2.78 2.41 2.43 2.83	2,766 4,733 1,147 803 1,439	4.22 4.28 ...	4.22 4.28 4.65 4.65 4.16	38.00 49.95 52.62 47.66 50.98	35.16 41.78 43.32 39.26 41.20	831.31 825.63 830.76 850.35 813.58	210.21 225.02 228.20 222.97 225.84			
				{ 250 248 280 289 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
				{ 248 280 289 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
				{ 280 289 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
				{ 289 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Coal and wood fuel consumed by each railway system and price paid per ton during the calendar years 1902 to 1906—contd.

		SOURCES OF SUPPLY.				DESCRIPTION OF FUEL WITH ACTUAL QUANTITY CONSUMED AND COST PER TON.								CONSUMPTION IN LBS.				REMARKS.	
		NAME. (The name of the source of supply is for coal only. Wood was supplied from various sources.)	AVERAGE DISTANCE CARRIED IN MILES. (The distance is reckoned either from the sources of supply or from the place of delivery to several storages.)		FOREIGN COAL.		INDIAN COAL.		WOOD.		(Calculated on the actual quantity of coal, and wood reduced in terms of coal at the rate of one ton of coal to 2½ tons of wood.)								
			Coal.	Wood.	Quantity in tons.	Cost per ton.		Quantity in tons.	Cost per ton.		Quantity in tons.	Cost per ton.		Per train mile.	Per engine mile.	Per 1,000 freight ton miles.	Per 1,000 gross ton miles.		
						In-cluding freight.	Ex-cluding freight.		In-cluding freight.	Ex-cluding freight.		In-cluding freight.	Ex-cluding freight.						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
							Rs.	Rs.		Rs.	Rs.		Rs.	Rs.					
	B. D.	{ 1902 1903 1904 1905 1906 }	Bengal						2,496 3,023 3,471 3,652 3,876	12-33 11-22 10-60 10-67 ...	2-75 ...				40-16 31-33 30-14 30-52 35-56	33-92 20-83 28-05 28-78 32-95			*Prices are given at the place of delivery which is the place of storage.
4	B. G. J. P.	{ 1902 1903 1904 1905 1906 }	Eng-land, Bengal and Palana	{ 52 54 53 52 53 }		1,099 613 2 5 ...	23-23 23-24 23-23 23-23 ...		4,066 6,027 7,531 8,010 9,050	18-00 15-44 14-13 14-07 13-54		74 80 88 83 91	8-88 7-73 7-50 7-50 8-03		29-77 30-26 31-20 32-05 33-45	27-45 27-32 28-37 29-03 30-25	913-30 800-61 774-69 816-07 840-55	174-04 170-38 173-11 179-85 186-52	
5	B.	{ 1902 1903 1904 1905 1906 }	Eng-land, Bengal and Burma.	{ 120 100 128 150 162 }		3,114 908 149 348 83	26-75 21-36 21-22 21-21 21-21		62,124 72,740 38,834 95,711 94,784	12-57 10-63 10-17 10-33 10-70		55,474 66,406 52,977 28,903 22,912	3-95 3-81 4-54 5-06 4-74		52-32 51-98 49-08 50-38 45-51	42-51 42-70 41-12 41-49 37-66	972-47 1,087-55 981-89 959-94 836-51	255-40 258-16 240-27 237-11 211-50	
6	D.	{ 1902 1903 1904 1905 1906 }	Bengal						400 393 501 ...	5-62 4-06 5-50 ...	3-00 ...				61-37 56-55 71-30 ...	61-37 56-55 ...			
7	S. D.	{ 1902 1903 1904 1905 1906 }	Assam						4,616 3,983 4,838 5,012 6,664	8-50 8-50 8-50 8-50 8-50	8-50 8-50 8-50 8-50 8-50	26 12 10 4 ...	2-08 2-56 1-71 2-22 ...	1-23 2-00 1-71 2-22 ...	51-61 43-67 51-88 49-79 55-07	36-75 29-46 33-39 32-06 36-34			
8	J. B.	{ 1902 1903 1904 1905 1906 }	Bengal and Palana.	{ 467 358 314 651 581 }					18,231 22,420 27,832 24,689 28,369	11-59 11-98 10-84 11-27 12-39	5-55 7-36 6-13 5-30 8-02	4,981 120 152 155 163	4-34 4-38 3-62 3-90 3-71	4-34 4-38 3-62 3-90 3-71	47-63 52-50 59-31 51-51 48-96	45-42 49-61 55-34 48-39 45-57	1,060-85 1,018-95 1,187-75 876-54 806-35	261-76 267-31 297-67 246-73 237-56	
9	M. R. W.	{ 1902 1903 1904 1905 1906 }	Bengal.	{ 4386 29 4386 445 4386 }					1,622 1,511 1,777 1,796 1,419	23-74 21-20 17-51 18-34 17-25	15-74 12-35 11-04 16-25 15-25	21 80 53 62 23	7-50 10-66 8-27 4-77 10-89	7-50 10-66 8-27 4-77 10-89	24-25 24-27 24-26 32-47 34-05	23-63 23-32 23-06 31-55 33-51			† This distance is by rail; the distance by sea is 687 miles.
10	R. M.	{ 1902 1903 1904 1905 1906 }	Bengal and Singa-roni.	{ 722 725 702 780 802 }					113,360 95,725 109,754 134,200 145,037	16-57 15-79 14-39 14-15 15-26	5-74 6-03 4-20 4-03 4-77	2,183 2,615 2,481 2,055 1,126	5-00 5-00 5-00 5-00 5-00	5-00 5-00 5-00 5-00 5-00	39-84 37-60 38-08 40-27 40-33	34-62 31-98 32-62 34-74 34-84	447-79 474-48 496-38 495-11 527-34	164-80 161-48 169-96 171-85 174-25	
11	R. & K.	{ 1902 1903 1904 1905 1906 }	Bengal	{ 677 677 606 605 612 }					2,068 1,792 1,719 8,942 8,749	13-52 11-46 13-63 11-03 10-85	2-56 2-37 3-00 2-35 2-75	17,503 17,105 10,673 8,938 17,779		3-18 3-27 3-47 2-94 3-49	32-00 30-91 32-25 48-29 45-98	25-08 25-25 26-28 34-79 36-55	631-00 613-87 633-13 794-75 500-71	188-86 173-58 183-90 237-60 121-08	
12	F. W. L.	{ 1902 1903 1904 1905 1906 }	Bengal	{ 655 655 655 655 655 }								1,440 1,226 1,400 1,303 1,520		3-05 3-26 21-31 3-59 3-56	21-03 19-03 19-08 20-39 21-94	19-91 17-81 19-96 16-41 20-74			
13	S. I.	{ 1902 1903 1904 1905 1906 }	Bengal and Singa-roni.	{ 63 82 83 81 79 }					58,273 60,096 68,680 72,314 73,541	13-11 12-18 11-40 11-39 11-83		10,782 10,518 11,295 9,477 5,587	5-01 4-91 4-90 5-01 4-94		36-44 37-71 38-21 38-90 36-38	33-19 34-23 34-70 38-74 33-13	822-47 774-08 846-81 802-70 777-07	209-97 205-48 213-52 200-51 190-82	

APPENDIX 27—concluded.

Coal and wood fuel consumed by each railway system and price paid per ton during the calendar years 1902 to 1906—concl'd.

Number.	By system, vide App. 38.	Calendar year.	SOURCES OF SUPPLY.			DESCRIPTION OF FUEL WITH ACTUAL QUANTITY CONSUMED AND COST PER TON.										CONSUMPTION IN LBS.				REMARKS.
			NAME (The name of the source of supply is for coal only. Wood was supplied from various sources.)	AVERAGE DISTANCE CARRIED IN MILES. (The distance is reckoned either from the sources of supply or from the places of delivery to several storages.)	FOREIGN COAL.			INDIAN COAL.			WOOD.			(Calculated on the actual quantity of coal, and wood reduced in terms of coal at the rate of one ton of coal to 2½ tons of wood.)						
					Coal.	Wood.	Quantity in tons.	Cost per ton.		Quantity in tons.	Cost per ton.		Quantity in tons.	Cost per ton.		Per train mile.	Per engine mile.	Per 1,000 freight ton miles.	Per 1,000 gross ton miles.	
								Including freight.	Excluding freight.		Including freight.	Excluding freight.		Including freight.	Excluding freight.					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
22	M.	{ 1902 1903 1904 1905 1906 }	England, Sagarai and Bengal.	{ 402 351 316 83 365 }	{ 96 74 72 82 79 }	{ ... 133 2,418 }	{ ... 18 88 19 08 }	{ ... 18 88 15 00 }	{ 38,506 18,492 40,327 47,125 53,037 }	{ 13 47 14 25 13 99 13 63 13 60 }	{ 5 25 8 10 8 30 8 95 6 38 }	{ 62,422 65,629 69,209 70,137 74,743 }	{ 5 64 5 44 5 32 5 36 5 37 }	{ 4 08 4 19 4 03 4 00 4 03 }	{ 39 11 40 71 37 79 37 04 39 38 }	{ 34 71 36 27 33 28 32 82 35 07 }	{ 804 00 803 88 710 39 718 13 744 54 }	{ 212 09 219 75 201 83 200 65 211 10 }		
23	U. C.	{ 1902 1903 1904 1905 1906 }	Bengal, Warora & Mohani.	{ 875 977 1,087 1,087 1,087 }	{	{	{	{	{ 803 863 701 762 908 }	{ 18 23 18 71 19 00 19 00 19 00 }	{ 4 62 3 65 2 25 2 25 3 75 }	{ 3 4 ... 11 10 }	{ 4 36 7 00	{ 7 00	{ 38 50 37 37 30 32 31 91 37 09 }	{ 36 02 35 02 25 51 29 88 34 74 }	{ 942 41 1,438 32 1,551 44 1,117 88 1,033 95 }	{ 192 23 207 76 185 59 167 86 177 39 }		
25	B. L.	{ 1902 1903 1904 1905 1906 }	Singaroni.	{ 441 273 }	{	{	{	{	{ 77 ... 159 289 ...	{ 14 50	{ 5 50	{ 635 566 790 742 1,102 }	{ 5 00 4 97 6 19 6 19 7 19 }	{ 5 30 4 97 6 19 6 19 7 19 }	{ 31 90 40 75 64 49 101 82 43 65 }	{ 31 14 39 32 92 82 99 93 42 29 }	{ 1,733 86 1,016 65 }	{ 664 00		
27	C.	{ 1905 1906 }	...	{	{	{	{	{	{ 123 215 }	{ 17 25 18 00 }	{	{ 2 3 }	{ 24 50 21 50 }	{	{ 64 16 29 71 }	{ 64 16 29 71 }	{ ... 3 76 }	{ ... 3 35 }		
30	K. S.	{ 1903 1904 1905 1906 }	Bengal	{ 1,021 1,018 1,016 904 }	{	{	{	{	{ 238 5,166 5,189 4,917 }	{ 20 00 21 00 17 50 18 15 }	{ 2 25 2 25 2 25 4 00 }	{ ... 144 43 3 }	{ 12 19 14 00 }	{	{ 46 43 69 46 71 18 77 29 }	{ 35 75 59 07 66 77 67 56 }	{ 7,984 93 6,500 13 5,407 71 ...	{ 1,135 26 932 22 893 13 ...		
32	B. P.	{ 1902 1903 1904 1905 1906 }	Bengal	{ 126 157 157 157 157 }	{	{	{	{	{ 979 960 1,083 1,128 1,428 }	{ 5 39 5 36 4 44 4 33 4 24 }	{ 2 75 2 92 2 03 1 56 1 81 }	{	{	{	{ 25 20 25 27 26 92 28 53 34 24 }	{ 23 92 24 10 25 37 26 92 32 33 }	{	{		
33	T. B.	{ 1902 1903 1904 1905 1906 }	Assam	{	{	{	{	{	{ 398 523 580 643 673 }	{ 13 50 11 81 13 50 13 50 13 50 }	{	{	{	{	{ 26 76 35 40 38 52 38 85 40 41 }	{	{	{		
35	D. H.	{ 1902 1903 1904 1905 1906 }	Bengal	{	{	{	{	{	{ 3,422 4,666 4,697 5,025 4,799 }	{ 15 30 13 98 10 09 7 84 10 00 }	{ 3 12 3 12 2 50 2 25 2 50 }	{	{	{	{ 40 81 53 23 41 22 44 08 46 08 }	{ 40 81 53 23 40 83 44 08 46 08 }	{	{		
38	J.	{ 1903 1904 1905 1906 }	Assam	{ 9 11 12 ...	{	{	{	{	{ 778 890 864 946 }	{ 13 76 13 61 13 61 13 61 }	{ 13 62 ... 8 53 ...	{	{	{	{ 33 15 34 61 35 90 41 76 }	{	{	{		
		{ 1902 1903 1904 1905 1906 }		{	{	{ 21,469 17,696 17,432 ...	{	{	{ 2,091,992 2,203,188 2,417,341 ...	{	{	{ 402,442 497,183 395,297 ...	{	{	{	{	{	{		
	TOTAL	{ 1905 1906 }		{	{	{ 18,235 37,280 ...	{	{	{ 2,668,424 2,878,281 ...	{	{	{ 253,093 245,224 ...	{	{	{	{	{	{		

* 12 miles from Steamer Ghat to Jorhat, 180 miles from Ledo to Moriant.

† Excluding the Bokharopore-Behar, Bana-ghat-Krishnagar, Thuton-Duyin-sak, Howrah-Amra and Howrah-Sheekhala Light railways.

‡ Excluding the Bokharopore-Behar, Thuton-Duyin-sak, Howrah-Amra and Howrah-Sheekhala Light railways.

§ Excluding the Deo-ghur and Barasat-Basirhat railways and the railways named in the remarks.

APPENDIX 28.

Coal mined in India during the calendar years 1885 to 1906.

YEARS.	QUANTITY MINED IN EACH PROVINCE.												Quantity of Indian coal consumed by railways in India.	QUANTITY OF INDIAN COAL EXPORTED BY SEA.		QUANTITY OF FOREIGN COAL IMPORTED INTO INDIA.	
	Bengal.	Central Provinces.	Assam.	Central India.	Nizam's territory.	Punjab.	Kashmir.	Baluchistan.	Rajputana (Bikaner).	Madras.	Burma.	Total.		To Indian ports, excluding Burma.	To ports outside India, including Burma.	From United Kingdom.	From other countries.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1885.	1,123,700	119,116	43,707	7,698	..	..	..	..	..	..	..	1,294,221	486,716	..	500	778,613	40,659
1886.	1,186,902	117,287	70,859	13,539	..	..	..	..	..	..	..	1,388,487	470,675	..	199	698,492	44,653
1887.	1,319,090	126,981	89,302	15,497	3,259	7,523	..	411	..	..	..	1,564,063	488,774	..	315	786,149	43,019
1888.	1,330,591	157,768	101,528	41,580	13,982	11,249	..	2,802	..	..	..	1,708,903	551,770	Information is not available.	15,796	785,776	20,463
1889.	1,541,356	144,465	110,676	52,956	59,646	22,835	..	8,238	..	..	..	1,946,172	715,240		39,972	717,924	52,180
1890.	1,620,245	137,022	145,708	77,842	125,486	40,677	..	15,511	..	..	..	2,168,521	654,829		26,336	631,725	21,927
1891.	1,717,122	141,736	154,268	69,741	144,668	60,714	..	10,368	..	20	..	2,328,577	797,142		4,515	726,069	17,944
1892.	1,920,050	132,005	164,050	88,623	149,601	66,352	..	13,284	..	61	3,670	2,537,696	885,492		15,725	628,374	29,123
1893.	1,902,866	135,118	161,420	94,348	157,421	77,294	..	20,094	..	562	9,938	2,562,001	924,900	..	52,302	616,319	18,066
1894.	2,035,934	140,195	163,448	132,837	240,525	66,467	..	24,753	..	1,337	12,111	2,823,907	1,062,748	143,813	154,582	675,043	57,112
1895.	2,716,155	122,776	172,717	148,479	292,915	72,493	..	25,453	..	1,737	17,289	3,440,019	1,119,621	162,276	211,407	773,675	15,458
1896.	3,037,920	141,155	177,259	115,386	262,681	79,017	..	26,257	..	..	22,993	3,863,698	1,182,051	389,842	191,030	524,420	33,212
1897.	3,142,497	131,629	185,533	124,778	365,550	92,792	..	12,043	..	..	11,472	4,066,294	1,338,120	731,742	399,979	210,257	47,016
1898.	3,622,090	149,709	200,329	134,726	394,622	85,862	..	13,372	511	..	6,975	4,608,196	1,418,241	737,689	490,290	297,076	34,209
1899.	4,035,265	156,376	225,623	164,569	401,216	81,835	..	15,822	4,249	..	8,105	5,093,260	1,560,771	672,311	467,306	496,451	112,064
1900.	4,978,492	172,842	216,736	164,489	469,291	74,083	..	23,281	9,250	..	10,228	6,118,692	1,858,061	1,030,709	711,874	91,710	43,939
1901.	5,487,585	191,516	254,100	164,362	421,218	67,730	..	24,650	12,094	..	12,466	6,635,727	1,956,631	1,157,892	845,953	112,519	79,103
1902.	6,259,286	196,981	221,096	171,538	455,424	55,373	1,000	33,889	16,502	..	13,302	7,424,402	2,031,992	974,602	723,316	198,574	20,773
1903.	6,861,212	159,154	239,328	193,277	362,733	43,704	999	46,909	21,764	..	9,306	7,438,386	2,203,889	1,235,318	723,873	133,711	30,429
1904.	7,063,680	139,037	266,765	185,774	419,546	45,594	270	49,867	45,078	..	1,105	8,216,706	2,447,341	1,447,867	893,885	176,703	77,169
1905.	*7,234,168	147,265	277,065	157,701	454,294	62,622	..	*11,725	42,964	..	..	*8,417,739	2,668,424	1,635,263	1,144,660	147,760	50,024
1906.	†8,096,391	92,848	285,490	170,292	467,924	73,000	..	42,164	92,372	..	1,223	†9,261,714	2,878,281	1,630,793	1,324,732	190,215	27,140

* Revised.
† Approximate.

APPENDIX 29.

State Collieries worked by Railway Companies or by the State.

PARTICULARS.	KURHURBAREE AND SERAMPORE.		WARORA.		MOHPANI.		DANDOT.		KHOOT.		HARANPUR FUEL FACTORY.		REMARKS.
	1905.	1906.	1905.	1906.	1905.	1906.	1905.	1906.	1905.	1906.	1905.	1906.	
Name of owner.	East Indian railway.		State.		Great Indian Peninsula railway.		North State	Western railway.	North State	Western railway.	North State	Western railway.	
Capital outlay Rs.	22,34,832	22,85,324	13,24,899	12,84,360	6,58,458	7,02,912	2,13,486	2,08,177	3,05,815	3,05,760	80,701	72,618	East Indian railway.—Capital outlay is approximate and is made up of the purchase money, Rs. 3,05,154, which represents half the original cost of buildings, plant, etc., paid to the East Indian Railway Company on valuation, and the capital expenditure incurred from 1st January 1890.
Output { Large coal. Tons	512,150	510,044	93,306	24,714	19,192	24,210	23,624	23,947	4,950	852	...	...
Small coal. Tons	19,226	20,060	29,709	7,613	...	...	25	140	296	73	...	...
Slack coal. Tons	86,628	87,875	...	...	*3,806	*3,293	14,513	14,574	28,685	31,575	...	...
Total. Tons	618,004	623,979	123,015	32,327	22,998	27,503	43,162	43,661	34,140	32,500	6,162	6,541	
Quantity issued Tons	627,020	649,950	122,843	32,498	23,388	25,944	43,162	43,661	34,140	32,500	6,162	6,541	Warora.—The decrease in the capital outlay in 1906 was due to sinking fund credits. The working of the colliery has been abandoned from 1st May 1906.
Gross earnings Rs.	11,20,869	10,81,330	5,67,346	1,77,470	1,16,056	1,44,457	3,25,404	3,40,218	3,01,444	2,73,610	68,426	75,223	Mohpani.—Purchased by the State with effect from the 1st July 1904.
Working expenses Rs.	11,20,809	10,81,339	3,80,477	1,30,513	1,68,815	1,77,997	3,21,843	3,45,709	2,93,050	2,95,382	67,075	71,149	Dandot.—The decrease in the capital outlay in 1906 was due to depreciation on the cost of works completed up to the end of the year and to a reduction of the Stores Imprest Account.
Net earnings or loss Rs.	...	...	1,87,069	46,957	-52,759	-33,540	3,561	-5,491	8,394	-21,772	1,351	4,073	Khoot.—The decrease in the capital outlay in 1906 was due to the charge for capital outlay being exceeded by annual depreciation.
Percentage on capital.	...	...	14.12	3.65	...	...	1.06	...	2.75	...	1.67	5.61	Haranpur.—The decrease in the capital outlay in 1906 was due entirely to the amount written off for depreciation.
Average number of persons employed daily.	8,370	6,900	967	413	680	730	1,360	1,340	719	704	7	12	* Splint coal.
Number of tons raised per person employed.	74	90	125	78	34	35	32	33	48	46	2	1	
Number of persons killed.	1	1	...	...	...	...	1	...	5	5	...	...
Number of persons injured.	10	10	4	2	1	1	4	4	1	1	...	...

APPENDIX 30.

Accidents and casualties to trains on railways treated as one System during the calendar years 1905 and 1906.

Description.	Accidents reported to Local Governments under section 83 of the Indian Railways Act, IX of 1890, i.e., serious accidents.		Other accidents.		Total number of accidents.		NUMBER OF PASSENGERS AND OTHERS. (Figures in italics were not passengers.)				NUMBER OF SERVANTS.				TOTAL OF ALL CLASSES.			
							Killed.		Injured.		Killed.		Injured.		Killed.		Injured.	
	1905	1906	1905	1906	1905	1906	1905	1906	1905	1906	1905	1906	1905	1906	1905	1906	1905	1906
1. Collisions between passenger trains or parts of passenger trains	5	5	4	6	9	11	...	1	30	24	...	3	5	6	...	4	35	30
2. Collisions between passenger trains and goods or mineral trains, engines, and vehicles standing foul of the line	20	40	31	26	51	66	1	3	63	$\left\{ \begin{smallmatrix} 77 \\ 4 \end{smallmatrix} \right\}$	1	7	24	36	2	10	87	117
3. Collisions between goods trains or parts of goods trains	11	20	57	71	68	91	1	...	4	...	1	8	36	31	2	8	40	31
4. Collisions between light engines	3	1	32	43	35	44	...	...	...	...	2	...	5	5	2	...	5	5
5. Passenger trains or parts of passenger trains leaving the rails	74	74	84	79	158	153	...	...	5	17	...	1	10	4	...	1	15	21
6. Goods trains or parts of goods trains, engines, etc. leaving the rails	7	9	365	385	372	394	...	1	...	4	...	5	4	...	1	5	8	8
7. Trains or engines travelling in the wrong direction through points	9	11	88	143	97	154	...	...	17	...	...	...	6	1	...	...	23	1
8. Trains running into stations or sidings at too high a speed	5	4	27	24	32	28	...	...	7	...	...	3	3	...	...	3	10	...
9. Trains running over cattle on the line	14	6	3,274	3,632	3,288	3,638	...	...	6	5	1	...	2	1	1	...	8	6
10. Trains running over obstructions on the line	15	18	165	162	180	180	$\left\{ \begin{smallmatrix} 1 \\ 3 \end{smallmatrix} \right\}$	$\left\{ \begin{smallmatrix} 1 \\ 6 \end{smallmatrix} \right\}$	$\left\{ \begin{smallmatrix} 15 \\ 5 \end{smallmatrix} \right\}$	$\left\{ \begin{smallmatrix} 12 \\ 21 \end{smallmatrix} \right\}$	2	2	1	4	6	9	6	31
11. Trains running through gates at level crossings	1	...	27	35	28	35	...	3	...	...	...	...	...	2	...	3	...	2
12. The bursting of boilers of engines . . . . .	...	...	2	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...
12 (a) The bursting of tubes, etc., of engines	1	...	296	288	299	288	...	...	...	...	...	...	...	...	...	...	...	...
Carried over	165	188	4,454	4,894	4,619	5,082	$\left\{ \begin{smallmatrix} 2 \\ 4 \end{smallmatrix} \right\}$	$\left\{ \begin{smallmatrix} 6 \\ 9 \end{smallmatrix} \right\}$	$\left\{ \begin{smallmatrix} 122 \\ 15 \end{smallmatrix} \right\}$	$\left\{ \begin{smallmatrix} 187 \\ 21 \end{smallmatrix} \right\}$	7	24	97	24	13	39	284	252

APPENDIX 30—concluded.

Accidents and casualties to trains on railways treated as one System during the calendar years 1905 and 1906—concl'd.

DESCRIPTION.	Accidents reported to Local Government under section 88 of the Indian Railways Act, 1X of 1890, i.e., serious accidents.		Other accidents.		Total number of accidents.		NUMBER OF PASSENGERS AND OTHERS. (Figures in italics were not passengers.)				NUMBER OF SERVANTS.				TOTAL OF ALL CLASSES.			
							Killed.		Injured.		Killed.		Injured.		Killed.		Injured.	
	1905.	1906.	1905.	1906.	1905.	1906.	1905.	1906.	1905.	1906.	1905.	1906.	1905.	1906.	1905.	1906.	1905.	1906.
Brought forward	185	183	4,454	4,894	4,619	5,082	2 4	6 9	122 15	137 21	7 7	24 24	97 94	94	13	39	234	252
13. The failure of machinery, springs, etc., of engines	3	...	813	756	816	756	...	...	...	...	1	1	1	...	1	1	1	...
14. The failure of tyres	...	...	13	5	13	5	...	...	...	...	...	...	3	...	...	...	...	3
15. Ditto of wheels	...	...	7	16	7	16	...	...	...	...	...	...	...	...	...	...	...	...
16. Ditto of axles	10	6	59	71	69	77	...	...	...	...	...	...	1	...	...	...	...	1
17. Ditto of brake apparatus	...	1	4	6	4	7	...	...	...	...	...	...	...	...	...	...	...	...
18. Ditto of couplings	2	6	330	353	332	359	...	...	...	29	...	1	5	4	...	1	5	33
19. Ditto of tunnels, bridges, viaducts, culverts, etc.	...	...	4	3	4	3	...	...	...	...	...	...	...	...	...	...	...	...
20. Broken rails	1	1	158	130	159	131	...	...	...	...	...	...	1	...	...	...	1	...
21. The flooding of portions of permanent-way	39	36	106	158	145	194	...	...	...	...	...	...	...	...	...	...	...	...
22. Slips in cuttings or on bankments	7	10	55	64	62	74	...	...	...	1	2	1	1	...	2	1	1	1
23. Fire in trains	2	3	209	150	211	153	1	3	1	2	...	1	...	1	1	4	1	3
24. Fire at stations, or involving injury to bridges or viaducts	2	10	57	52	59	62	1	2	...	...	...	3	1	5	1	5	1	5
25. Other accidents	18	31	605	721	623	752	...	...	17	25 1	5	8	9	40	5	8	26	66
TOTAL	249	292	6,874	7,379	7,123	7,671	3 5	9 11	140 15	194 22	15	39	115	148	23	59	270	264

Numerical return of servants of all races employed on each railway system (open lines only) and

NUMBER.		RAILWAY SYSTEM. (Vide Appendix 38)	NUMBER OF SERVANTS EMPLOYED.							
			Europeans.		Eurasians.		Natives.		Total.	
			1905. Revised.	1906.	1905. Revised.	1906.	1905. Revised.	1906.	1905. Revised.	1906.
1	...	Bengal-Nagpur	447	545	754	726	23,757	28,494	24,958	29,765
2	(a) to (f) & (n) & (o).	Bombay, Baroda and Central India	297	229	271	217	15,783	16,384	16,291	16,880
3	...	Eastern Bengal State	327	379	411	517	26,762	30,516	27,490	31,412
4	...	East Indian	1,506	1,534	1,026	1,064	76,497	82,221	79,029	84,819
5	...	Great Indian Peninsula	1,103	1,138	998	971	65,617	67,710	67,718	69,819
6	...	Madras	268	308	1,616	1,666	24,386	25,667	26,270	27,641
8	...	Nizam's Guaranteed State	72	90	382	390	7,634	7,854	8,088	8,334
9	...	North Western State	888	986	718	748	61,660	64,357	63,266	66,096
10	...	Oudh and Rohilkhand State	317	322	359	311	21,273	21,860	21,940	22,493
11	...	Assam-Bengal	85	84	95	103	5,774	6,311	5,954	6,498
12	...	Bengal and North-Western	166	173	195	237	20,023	21,779	20,383	22,189
13	...	Bengal Doonars	4	4	4	4	1,170	1,167	1,178	1,175
14	...	Bhavnagar-Gondal-Junagad-Forbandar	9	7	30	30	2,661	2,742	2,700	2,779
15	...	Burma	209	160	616	607	18,673	15,105	14,498	15,872
16	...	Deoghur . . . . .	...	...	1	1	66	66	67	67
17	...	Dibru-Sadiya	9	9	...	...	983	1,053	992	1,062
18	...	Jodhpur-Bikaner	11	11	6	4	3,515	3,771	3,532	3,786
19	...	Morvi	1	1	2	2	388	388	391	391
2	(g) to (m)	Rajputana-Malwa	444	462	489	513	28,072	28,154	29,005	29,129
20	...	Rohilkund and Kumaon	27	25	19	24	3,450	3,571	3,496	3,620
21	...	South Indian	157	158	748	717	15,028	15,143	15,933	16,018
22	...	Southern Mahratta	188	170	422	459	15,003	15,358	15,613	15,987
23	...	Udaipur-Chitor	2	2	...	...	363	362	370	364
24	...	Baraset-Basirhat Light . . . . .	...	...	1	1	169	153	170	154
25	...	Barsi Light	2	2	4	6	178	350	184	358
26	...	Bukhtiarporo-Behar Light	1	1	...	...	111	115	112	116
27	...	Cutch	1	1	...	...	55	55	56	56
30	...	Kalka-Simla	16	17	...	...	312	325	329	342
32	...	Tarakeshwar-Magra Light . . . . .	...	...	1	1	225	228	226	229
33	...	Tozporo-Balipara Light	2	2	2	2	188	190	192	194
35	...	Darjeeling-Himalayan	24	24	10	9	865	694	899	927
36	...	Howrah-Amra Light	5	5	1	1	370	445	376	451
37	...	Howrah-Sheakhala Light . . . . .	...	...	...	...	104	95	104	95
38	...	Jorhat	1	1	...	...	214	235	215	226
TOTAL			6,529	6,850	9,181	9,386	436,323	463,108	452,033	470,284

DIX 31.

the amounts deposited by them in the Provident Fund at the close of the calendar year 1906.

AMOUNT DEPOSITED IN PROVIDENT FUND.						REMARKS.
Number of depositors.		Amount at credit on the 31st December 1905.				
Voluntary.	Compulsory.	Voluntary.	Compulsory.	Bonus given by the Railway.	Total to depositors' credit.	
		Rs.	Rs.	Rs.	Rs.	
286	4,338	1,89,773	12,12,186	9,22,107	23,34,066	
2	8,119	26,549	17,22,852	18,14,663	35,64,064	Excludes the Provident Fund transactions of the Godhra-Rutlam-Nagda railway which are included with those of the Rajputana-Malwa railway.
175	5,938	25,000	14,35,741	12,35,708	26,98,449	
7,128	10,420	...	...	...	1,40,67,937	Amounts under voluntary and compulsory deposits and bonus given by the railway are not available.
3	8,057	1,027	1,03,78,634	...	1,03,79,661	The bonus given by the railway is included in the amount at the credit of voluntary and compulsory depositors.
117	6,510	1,30,543	19,57,419	15,90,157	36,78,119	
...	1,440	...	6,01,902	5,45,136	11,47,038	
449	8,941	1,00,269	35,50,260	31,88,433	68,38,692	
148	3,302	31,351	10,08,543	8,63,414	19,03,308	
...	1,122	...	2,81,284	1,61,230	4,42,523	
10	2,294	69,161	8,70,907	8,21,083	17,61,156	
...	180	...	33,744	27,294	61,038	
170	479	35,874	2,05,640	1,50,087	3,91,601	
...	3,038	...	9,66,962	7,71,060	17,38,022	
...	
...	
33	396	6,577	91,009	81,933	1,79,609	
...	77	...	19,415	2,801	22,216	
•	•	•	•	•	•	* Information not available owing to destruction of records by fire.
1	564	123	1,71,073	1,46,872	3,18,068	
22	2,951	8,048	12,33,921	7,05,838	19,47,807	
...	3,768	...	13,92,399	7,06,442	20,98,841	
...	38	...	7,710	3,596	11,306	
...	19	...	993	840	1,833	
...	
...	18	...	1,553	1,133	2,686	
...	
1	160	50	7,510	6,908	14,474	
...	
...	
...	145	...	1,34,930	76,012	2,11,812	
...	86	...	18,541	6,119	19,660	
...	12	...	2,268	1,463	3,731	
10	30	1,010	6,848	3,731	11,589	
8,555	67,482	6,35,855	2,73,09,340	1,38,34,974	5,58,47,606	

APPENDIX 32.

Number of men enrolled in Railway Volunteer Corps on the 31st December 1906.

NUMBER.		Corps.	ENROLLED STRENGTH.					Total number of European and Eurasian servants on open lines of railway.	Sergeant Instructors furnished by the Army.	REMARKS.
			EFFICIENTS.			Non-efficient.	Total number of volunteers of all nationalities in corps, including servants on construction work.			
			Officers.	Non-Commissioned officers.	Volunteers.					
Main head.	Sub-head.									
1	...	Bengal-Nagpur ...	36	118	1,012	22	1,188	1,271	10	
2	(a) to (f) & (n) & (o)	Bombay, Baroda and Central India— First Battalion, Bombay, Baroda and Central India Railway Volunteer Rifles ...	18	92	442	3	555	446	5	
3	...	Eastern Bengal State ..	18	94	712	10	834	898	4	
4	...	East Indian ...	76	207	2,097	36	2,416	2,598	18	
5	...	Great Indian Peninsula— First Battalion, Great Indian Peninsula Railway Volunteer Rifles ...	47	193	1,261	11	1,512	2,109	13	
6	...	Madras ...	45	197	1,286	32	1,560	1,974	12	
8	...	Nizam's Guaranteed State— Hyderabad Volunteer Rifles ..	8	23	152	30	213	480	3	
9	...	North Western State ...	41	140	1,034	53	1,271	1,739	12	
10	...	Oudh and Rohilkhand State— Oudh and Rohilkhand Railway Volunteer Rifles ...	15	74	433	10	532	633	4	
		Oudh and Rohilkhand Railway Reservists ...	2	6	59	..	67		...	
		Oudh Light Horse ...	...	1	1	...	2		...	
11	...	Assam-Bengal ..	18	27	223	...	268	187	3	
12	...	Bengal and North-Western— Bengal and North-Western Railway Volunteer Rifles ...	22	45	260	...	327	410	5	
		United Provinces Light Horse, Gorakhpur Squadron ...	2	7	35	1	45		1	
14	...	Bhavnagar-Gondal-Junagad-Porbandar— First Battalion, Bombay, Baroda and Central India Railway Volunteer Rifles, F. Company ...	1	7	23	..	30	37	1	
15	...	Burma ...	28	83	635	28	774	767	9	
19	...	Morvi— First Battalion, Bombay, Baroda and Central India Railway Volunteer Rifles, F. Company ...	...	1	1	...	2	3	...	
3	(g) to (m)	Rajputana-Malwa— Second Battalion, Bombay, Baroda and Central India Railway Volunteer Rifles ...	29	91	656	7	783	915	11	
20	...	Rohilkhand and Kumaon— Bengal and North-Western Railway Volunteer Rifle Corps ...	...	2	32	2	36	49	1	
21	..	South Indian ..	27	72	503	5	607	875	8	
22	...	Southern Mahratta ..	25	130	608	...	763	629	7	
23	...	Udaipur-Chitor— Bombay, Baroda and Central India Railway Volunteer Rifles ...	...	1	1	..	2	2	...	
32	...	Tarakeshwar-Magra— East Indian Railway Volunteer Rifles ..	...	...	1	...	1	1	...	
35	...	Darjeeling-Himalayan— Northern Bengal Mounted Rifles, "A" and "B" Troops ...	1	3	13	...	17	33	1	
TOTAL ...			457	1,619	11,470	250	13,805	16,104	128	

APPENDIX 33.

Strength and cost of the Police force on each Railway system (open lines), and the amount of compensation payments on account of claims for goods lost or damaged, for the calendar year 1906.

NUMBER.		RAILWAY SYSTEM. (Vide Appendix 38.)	Subordi- nate officers.	Consta- bles and men.	PORTION OF THE TOTAL ANNUAL COST BORNE BY THE RAILWAY.				Cost of force to the railway per mile open.	Compen- sation payments on account of claims for goods lost or damaged.	REMARKS.
Main head.	Sub- head.				Supervi- sion.	Consta- bles and men.	Contingencies.	Total cost of force to the railway.			
			Average No.	Average No.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
1	...	Bengal-Nagpur	15	836	17,953	59,554	4,953	82,460	40-16	48,887	
2	(a), (c) to (f) & (n) & (o).	Bombay, Baroda and Central India.	79	578	28,051	68,939	7,025	99,615	115-86	44,334	
3	...	Eastern Bengal State . . .	100	976	780	75,401	85	76,269	57-41	1,63,695	
4	...	East Indian	78	2,105	61,395	1,58,638	48,557	2,68,590	110-49	73,672	
5	...	Great Indian Peninsula . . .	38	1,660	68,667	1,41,539	21,351	2,31,557	77-36	1,03,657	
6	...	Madras	23	783	14,506	89,091	9,674	1,13,271	71-10	6,854	
8	...	Nizam's Guaranteed State . .	3	391	17,634	40,011	4,200	61,845	83-27	1,380	
9	...	North Western State . . . .	...	1,563	...	1,50,992	1,116	1,52,108	35-31	1,45,271	
10	...	Oudh and Rohilkhand State . .	9	659	5,728	47,752	1,742	55,222	41-70	20,337	
11	...	Assam-Bengal	5	229	8,603	17,767	1,814	28,184	36-56	3,020	
12	...	Bengal and North-Western . .	29	655	3,130	59,754	1,171	64,055	41-42	6,329	
13	...	Bengal Doonars . . . . .	...	10	...	1,068	...	1,068	6-98	401	
14	...	Bhavnagar-Gondal-Junagad-Port- bandar.	26	123	16,787	11,198	6,607	34,592	75-95	472	
15	...	Burma	87	480	29,937	75,897	18,109	1,23,743	92-31	16,239	
16	...	Jodhpur-Bikaner	3	41	1,869	4,217	614	6,700	8-04	6,072	
17	(b) & (g) to (m).	Rajputana-Malwa	117	1,022	37,000	82,443	10,142	1,29,585	59-55	59,947	
18	...	Morvi	6	14	658	5,695	240	6,533	69-66	22	
19	...	Rohilkund and Kumaon	12	172	1,741	13,518	1,487	16,776	47-27	1,207	
20	...	South Indian . . . . .	...	247	...	71,953	...	71,953	52-89	5,066	
21	...	Southern Mahratta	14	753	22,790	87,946	8,750	1,19,486	71-47	8,659	
22	...	Barsi Light	1	7	256	772	25	1,053	13-41	58	
23	...	Kalka Simla	1	44	329	2,901	40	3,270	55-01	632	

APPENDIX 34.

Transactions of the Fine Funds for the calendar year 1906.

NUMBER.		RAILWAY SYSTEM. (Vide Appendix 38.)	ASSETS.				DISBURSEMENTS.						Balance on 31st December 1906.
Main head.	Sub-head.		Balance on 31st December 1906. (Revised)	Fines and bonus forfeited during 1906.	Interest on balance.	Total.	Hospitals for sick employees.	Compassionate allowances.	Schools.	Recreation clubs.	Miscellaneous.	Total.	
			Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1	...	Bengal-Nagpur	28,718	18,439	745	47,902	...	...	1,235	4,800	6,595	12,130	35,772
2	(a), (c) to (f) & (n) & (o).	Bombay, Baroda and Central India	2,622	5,890	64	8,576	107	607	240	860	5,622	7,438	1,140
3	...	Eastern Bengal State	12,878	10,501	392	23,771	...	243	3,510	6,183	1,659	11,594	12,177
4	...	East Indian	1,06,719	16,481	3,072	1,26,272	...	233	2,319	18,035	24,420	45,007	81,265
5	...	Great Indian Peninsula	10,641	15,829	594	33,061	...	4,667	1,120	2,432	15,330	22,949	10,112
6	...	Madras	1,06,078	10,454	4,100	1,21,532	105	10,327	2,753	114	17,330	30,631	90,848
8	...	Nizam's Guaranteed State	9,410	2,584	391	12,325	...	...	120	...	772	802	14,433
9	...	North Western State	17,446	21,993	594	40,033	...	143	8,465	10,704	3,863	23,180	16,853
10	...	Oudh and Rohilkhand State	8,309	10,083	275	18,667	...	...	...	609	3,537	4,146	14,521
11	...	Assam-Bengal	9,662	10,753	...	20,415	...	130	661	3,816	7,193	11,800	8,615
12	...	Bengal and North-Western	90,083	13,878	1,454	1,05,445	...	63	1,125	1,593	5,186	7,967	97,478
13	...	Bengal Doars	1,618	657	41	2,316	...	...	141	505	...	647	1,669
14	...	Rhavnagar-Gondal-Junagad-Portbandar	6,120	894	196	7,210	...	109	...	639	673	1,412	5,798
15	...	Burma	6,999	20,758	...	27,757	...	50	2,571	7,362	13,095	23,085	4,672
18	...	Jodhpur-Bikaner	6,810	2,724	...	9,534	...	...	205	732	...	938	8,576
19	...	Morvi	1,549	45	...	1,594	...	114	...	...	5	109	1,475
2	(b) & (y) to (m).	Rajputana-Malwa	Information not available owing to destruction of records by fire.										
20	...	Rohilkhand and Kumaon	20,549	3,049	983	33,581	...	...	...	940	...	940	32,641
21	...	South Indian	1,48,643	6,970	4,390	1,60,008	153	925	561	8,893	1,330	11,865	1,48,143
22	...	Southern Mahratta	1,766	4,653	30	6,448	9	200	1,291	2,425	475	4,400	2,053
23	...	Udaipur-Chitor	349	68	...	417	...	...	...	...	...	...	417
24	...	Baraset-Basirhat Light	...	78	...	78	...	...	...	...	79	78	...
26	...	Bukhtiarpore-Bihar Light	...	34	...	34	...	...	...	...	34	34	...
30	...	Kalka-Simla	547	396	...	943	...	...	...	240	23	263	680
32	...	Tarakeshwar-Magra Light	...	13	...	13	13	...	...	...	...	13	...
33	...	Tezporo-Balipara Light	16	67	...	83	...	...	56	...	...	56	27
35	...	Darjeeling-Himalayan	196	103	...	299	...	...	...	150	27	177	122
36	...	Howrah-Amra Light	...	223	...	223	...	...	...	...	223	223	...
37	...	Howrah-Sheakhala Light	...	39	...	39	...	...	...	...	39	39	...
38	...	Jorhat	873	106	11	490	...	...	...	...	120	120	370

APPENDIX 35.

Railway and Railway Aided Schools at the close of the calendar year 1906.

Main head. Sub-head.		NUMBER.	RAILWAY SYSTEM. (Vide Appendix 38.)	RAILWAY SCHOOLS.											RAILWAY AIDED SCHOOLS.					REMARKS.	
				Number of schools.	ATTENDANCE.				CONTRIBUTIONS.						Expenditure.	Number of schools.	AVERAGE DAILY ATTENDANCE.		RAILWAY GRANT.		
					Children.		Apprentices and workmen.		By Government.	By Railway.		By school fees.	Total.	Children.			Apprentices and workmen.	From Revenue.	From Fine Fund.		
					Number on the rolls.	Average daily attendance.	Number on the rolls.	Average daily attendance.		From Revenue.	From Fine Fund.										
									Rs.	Rs.	Rs.	Rs.	Rs.				Rs.	Rs.			
1	...	B. N.	{ European Native	6 3	241 214	156 194	... ...	... ...	4,127 ...	3,500 875	400 835	4,653 905	12,880 2,615	12,232 3,732	3 ...	63 ...	...	900 ...	...	
2	(a) to (f) & (g)	B. & C. I.	{ European Native	3 2	79 10	58 7	6 18	5 16	526 239	3,280 393	165 75	2,375 225	6,826 932	6,221 883	18 ...	63 ...	...	3,123 ...	...	
3	...	E. B.S.	{ European Native	... 5	... 96	... 73	... 269	... 91	... ...	... 1,081	... ...	... ...	... 1,081	... 1,081	5 13	109 373	27 ...	2,449 1,061	2,449 1,061
4	...	E. I.	{ European Native	19 67	648 2,637	767 1,865	90 3,166	71 1,203	17,345 3,194	23,982 3,570	... 2,139	92,131 12,434	1,33,461 21,321	1,31,824 20,974	4 1	160 219	...	1,629 ...	... 180	
5	(a)	G. I. P.	{ European Native	5 ...	253 ...	210 ...	... ...	... ...	2,719 ...	12,913 ...	833 ...	2,678 ...	19,223 ...	19,223 ...	8 12	76 434	...	3,613 2,373	163 ...
5	(b) to (f)	I. M.	{ European Native	2 ...	108 ...	70 ...	... ...	... ...	1,120 ...	4,679 ...	124 ...	1,222 ...	7,145 ...	7,115 ...	2 ...	8 ...	...	46 ...	...	
6	...	M.	{ European Native	9 2	405 78	344 60	... ...	... ...	4,251 ...	23,173 1,668	2,758 ...	4,191 139	34,776 2,207	35,311 1,819	14 3	187 139	...	4,754 510	...
8	(a) & (b)	N. G. S.	{ European Native	2 2	78 72	60 57	... 12	... 6	... ...	1,668 1,027	... ...	139 173	2,207 1,100	1,819 1,034	3 6	139 421	...	510 540	... 120
9	...	N. W.	{ European Native	2 25	87 120	67 98	16 2,339	12 493	2,259 ...	2,651 5,298	749 100	710 278	6,399 5,736	6,663 4,811	18 4	105 194	...	1,148 2,108	3,992 707		
10	...	O. & R.	{ European Native	4 3	46 ...	38 ...	37 91	33 33	525 ...	2,681 362	... ...	1,038 ...	4,244 362	3,296 362	17 3	76 142	...	7,915 1,189	...	
11	...	A. B.	{ European Native	1 ...	8 ...	6 ...	... ...	... ...	349 ...	1,200 ...	153 ...	86 ...	1,787 ...	1,566 ...	... 2	... 35	...	... ...	...
12	...	B. & N. W.	{ European Native	2 ...	70 ...	61 ...	... ...	... ...	1,570 ...	2,769 ...	1,125 ...	961 ...	6,416 ...	5,621 ...	... 2	... 43	...	... 321	...
13	...	B. D.	{ European Native	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	1 ...	18 ...	...	... ...	112 ...
14	...	B. G. J. P.	{ European Native	1 2	25 89	16 72	... ...	... ...	... ...	996 584	... ...	598 249	1,394 833	1,273 821	... ...	... ...	...	... ...	...
15	...	B.	{ European Native	3 2	67 140	45 95	18 17	17 16	2,010 2,444	75 415	675 1,195	1,476 2,214	4,236 6,268	4,117 5,389	16 13	33 37	...	423 278	423 278		
17	...	D. S.	{ European Native	1 ...	63 ...	50 ...	... ...	... ...	... ...	300 ...	... ...	502 ...	802 ...	1,627 ...	... ...	... ...	...	... ...	...
18	...	J. B.	{ European Native	1 ...	12 ...	8 ...	... ...	... ...	... ...	... ...	225 ...	... ...	225 ...	225 ...	... ...	... ...	...	... ...	...
8	(c)	H. G. V.	{ European Native	2 ...	30 ...	35 ...	... ...	... ...	... ...	737 ...	... ...	240 ...	977 ...	772 ...	... 1	... 38	...	... 120	...
2	(g) to (m)	R. M.	{ European Native	7 5	177 258	138 206	95 80	86 74	2,415 960	3,316 586	3,120 1,447	4,278 2,245	13,129 5,238	13,010 5,230	1 ...	65 ...	...	180 ...	...	
21	...	S. I.	{ European Native	4 1	162 58	120 41	3 ...	3 ...	1,240 115	4,352 470	504 ...	827 202	6,983 787	4,916 470	... ...	... ...	...	... ...	...
22	...	S. M.	{ European Native	9 6	212 181	179 150	... 103	... 35	831 156	5,939 1,050	80 250	1,561 1,393	8,411 2,849	8,440 2,516	7 1	304 108	...	... ...	850 111
38	...	T. B.	{ European Native	1 ...	... ...	... ...	29 ...	9 ...	... ...	32 56	... ...	... ...	88 ...	88 ...	... ...	... ...	...	... ...	...
Total				207	6,898	5,289	6,391	2,208	48,448	1,14,235	17,129	1,40,520	3,20,331	3,12,653	175	3,780	29	48,085	10,984		

APPENDIX 38.

History of open lines of railways, and of lines under construction or sanctioned for commencement, on the 31st December 1906.

INDEX.

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2	(h)	Ahmedabad-Parantij	122	9	(h)	Khushalnagar-Kohat-Thal	165
9	(b)	Amritsar-Patti	160	6	(c)	Kolar Gold-fields	151
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22	(b)	Bellary-Rayadrug	195	20	(b)	Lucknow-Barilly	187
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5	(e)	Bina-Gooma-Baran	145	23	(h)	Mysore-Nanjangund	199
23	(c)	Birur-Shimoga	196	12	(i)	Mysore section (Southern Mahratta)	199
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26	(a)	Bukhtiarpor-Belahr Light	201				
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15	(b)	Burma extensions	179				
C				N			
10	(c)	Cawnpore-Burhwal (3' 3 1/2' gauge) link	168	7	(a)	Nagda-Muttra	155
3	(d)	Cooch Behar	173	2	(c)	Nagda-Ujjain	118
27	(a)	Cutch	204	6	(c)	Nalari	153
D				8	(a)	Nizam's Guaranteed State	155
9	(j)	Dandot Light	165	9	(a)	North Western (State)	158
35	(a)	Darjeeling-Himalayan	208	9	(c)	Nowshera-Durgai	165
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17	(a)	Durgamcherry	180				
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E				O			
3	(a)	Eastern Bengal (State), Eastern, Southern and Central sections (5' 6" gauge)	129	7	(a)	Ondh and Rohilkhand (State)	106
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5	(a)	Great Indian Peninsula	139	21	(c)	Powdicherry	191
23	(d)	Guntakal-Mysore Frontier	196	20	(c)	Powayan Light	188
5	(g)	Gwalior Light	147	1	(g)	Purulia-Itanchi	116
H				R			
10	(b)	Hardwar-Dehra	167	1	(e)	Raipur-Dhamtari	114
22	(e)	Hindupur (Yesvantpur-Mysore Frontier)	197	2	(a)	Rajpla	120
22	(f)	Hopet Kottur	198	9	(e)	Rajputana-Bhatinda	162
36	(a)	Howrah-Amti Light	209	2	(f)	Rajputana-Malwa	125
37	(a)	Howrah-Shenkhala Light	210	20	(a)	Rohilkhand and Kumaon	155
8	(c)	Hyderabad-Godavari Valley	157				
I				S			
5	(f)	Indian-Midland	146	6	(i)	Salem-Attur	155
J				22	(m)	Sangli	203
2	(j)	Jaipur (Siwai-Madhupur)	124	31	(a)	Shabdara (Delhi)-Saharanpur Light	206
9	(c)	Jammu and Kashmir (Native State section)	160	6	(j)	Shorapur-Cochin	153
14	(c)	Jamnagar	176	4	(c)	South Behar	138
14	(d)	Jetalsar-Bajkot	177	21	(a)	South Indian	156
18	(a)	Jodhpur	183	12	(a)	Southern Mahratta	194
19	(c)	Jodhpur-Hyderabad (British section)	184	9	(f)	Southern Punjab	163
38	(a)	Jorhat	211	9	(g)	Southern Punjab "Ludhiana" extension	164
1	(b)	Jubbulpore-Gondia extension	114				
9	(k)	Jullundur-Kapurthalla-Sultampur (British section)	168				
9	(l)	Jullundur-Kapurthalla-Sultampur (Native State section)	168				
				T			
2	(j)	Jaipur (Siwai-Madhupur)	124	21	(d)	Tanjore District Board	192
9	(c)	Jammu and Kashmir (Native State section)	160	3	(f)	Tapti Valley	121
14	(c)	Jamnagar	176	32	(a)	Tarakeswar-Magra Light	206
14	(d)	Jetalsar-Bajkot	177	4	(d)	Turkeshur	188
18	(a)	Jodhpur	183	33	(a)	Tezpor-Balipara Light	207
19	(c)	Jodhpur-Hyderabad (British section)	184	34	(a)	Thuton-Buyinzaik Light	207
38	(a)	Jorhat	211	21	(e)	Tinnevely-Quilon (Travancore) (British section)	183
1	(b)	Jubbulpore-Gondia extension	114	21	(f)	Tinnevely-Quilon (Travancore) (Native State section)	193
9	(k)	Jullundur-Kapurthalla-Sultampur (British section)	168	12	(b)	Tirhoot	172
9	(l)	Jullundur-Kapurthalla-Sultampur (Native State section)	168	6	(h)	Tirupattur-Krishnagiri	155
				U			
2	(j)	Jaipur (Siwai-Madhupur)	124	23	(a)	Udaipur-Chitor	202
9	(c)	Jammu and Kashmir (Native State section)	160				
14	(c)	Jamnagar	176				
14	(d)	Jetalsar-Bajkot	177				
18	(a)	Jodhpur	183				
19	(c)	Jodhpur-Hyderabad (British section)	184				
38	(a)	Jorhat	211				
1	(b)	Jubbulpore-Gondia extension	114				
9	(k)	Jullundur-Kapurthalla-Sultampur (British section)	168				
9	(l)	Jullundur-Kapurthalla-Sultampur (Native State section)	168				
				V			
2	(j)	Jaipur (Siwai-Madhupur)	124	2	(m)	Vijapur-Kalol-Kadi	127
				W			
2	(j)	Jaipur (Siwai-Madhupur)	124	22	(j)	West of India Portuguese	200

[For Index see page 112.]

Chairman—SIR SAMUEL HOARE, BART.

Managing Director—R. MILLER, Esq.

Offices—132, Gresham House, Old Broad Street, London.

Lines comprising the system.—The Bengal-Nagpur railway system is made up of—

Running powers—

Home line over Foreign line :—

Foreign line over Home line:—

Great Indian Peninsula railway at Katni (for passenger trains only)	1'60
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1 (a) Bengal-Nagpur railway (5' 6" gauge) —

Details of construction—

The open mileage of the Bengal-Nagpur railway, 5' 6" gauge, amounts to 1,694.51 miles, which may be divided into (1) *Bengal-Nagpur railway proper*, main line (Asansol to Nagpur), 626.83 miles, branches, 755.75 miles; and (2) *Northern section of the old East Coast (State) railway*, main line (Barang to Waltair), 284.75 miles, branch, 27.18 miles. Of this 71.54 miles are double line. Besides these, 355.50 miles were under construction and 44 miles, Sini to Gurumaishini were sanctioned for construction but not commenced.

The construction of the first portion of the main line, Asansol to Nagpur, was sanctioned in 1884 and opened through in 1891. The Sini-Howrah section was opened in 1900.

Permanent-way.—The line is laid with 75-lb. and 85-lb. steel rails on transverse wooden, steel and cast iron po sleepers.

Ballast.—The line is ballasted throughout with stone, except for a few miles on the Chakardharpore district where laterite is used.

Fencing.—The line is fenced only between Nagpur and Kamptee and at the more important stations, also at some of the station yards and first class level crossings on the Baraug-Waltair section.

Curves.—On the main line there are no curves sharper than 1,000 feet radius.

Gradients.—The ruling gradient between Asansol and Nagpur, and Bilaspur and Katni is 1 in 100 ; between Sini and Khargpur, 1 in 125 ; between Khargpur and Waltair, 1 in 150 ; between Khargpur and Howrah, and Khurda Road and Puri 1 in 200 ; and between Midnapore and Bhojudih, 1 in 200 in the down direction, and 1 in 125 in the up direction.

Terms of contracts -

The Bengal-Nagpur railway is worked under the following contracts :—

Contracts of—9th March 1887.—Bengal-Nagpur Railway Company's principal contract.

31st December 1891.—Contract for the construction and working of a branch line from Jharsuguda (Sambalpur Road) station on the main line to Sambalpur.

27th June 1901.—As to the raising of debenture capital for the construction of the Sini-Midnapore-Howrah and Midnapore-Cuttack extensions.

23rd January 1902.—Contract for the construction and working of the Raipur-Dhamtari (2' 6" gauge) feeder line with a branch to Rajim; an extension (5' 6" gauge) from Sini *via* Midnapore to Howrah, with branches from Midnapore to Cuttack and the Jharia coal-fields; a line (2' 6" gauge) from Gondia to Jubbulpore with branches from Nainpur to Mandla, Nainpur to Chhindwara; and for the working of the Northern section of the East Coast (State) railway as part of the undertaking.

The general conditions of the contracts are as follows :—

Government aid.—Free grant of land and guarantee of interest in sterling at 4 per cent. per annum on £8,000,000 share capital. On any further capital that may be required the guarantee to be 4 per cent. or such other rate as may be agreed upon.

Terms of contracts.—The contracts provide for the Company raising £3,000,000; any further money required being provided either by the Secretary of State upon such terms as may from time to time be mutually agreed upon, or by the Company within such periods and in such instalments as the Secretary of State may prescribe. Subject to the provisions of the contracts, all moneys raised by the Company become the absolute property of the Secretary of State.

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 112.]

Number ^{Main head 1} Sub-heads (a) to (g) **BENGAL-NAGPUR RAILWAY SYSTEM—*contd.***

1 (a) Bengal-Nagpur railway (5' 6" gauge)—*concl'd.***Terms of contracts—*concl'd.****Currency of contracts:—*

(1) *Principal contract.*—Government may determine the contract by giving twelve months' previous notice on the 31st December 1913 or on the 31st December of any succeeding tenth year. Government may also terminate the contract at any time, on six months' notice, if the Company fails to fulfil its obligations or the line be worked at a loss. On the termination of the contract the Company is to hand over to Government the railway and all its belongings of every description, and Government are to repay at par the amount of the share capital which has been paid in by the Company.

(2) *Sambalpur branch contract.*—The contract for this branch brings it within the provisions of the original contract of 9th March 1887; but provides that the Government may purchase the branch at any time after 1st January 1895 on giving twelve months' notice.

(3) *Contract of 23rd January 1902: Northern section, East Coast (State) railway.*—Government may, at any time, by giving six months' previous notice, require the Company to retransfer the whole or any part of the section of railway between Vizianagram and Waltair Junction with all appurtenances, without compensation in respect of such retransfer.

Power of Company to surrender contract.—Nil.

Terms of working.—After deducting working expenses—which may include any single item of capital expenditure classed as a 'Minor Work,' up to Rs. 1,000 but not exceeding Rs. 2,000 at the discretion of the Consulting Engineer subject to a maximum charge on such account of Rs. 20 per mile of the open system in each half-year and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision—three parts of the surplus profits for any complete calendar year, after providing for payment to Government of interest on advances of capital made by them to the Company and for repayment of the interest paid by them to the Company for that year, to be retained by Government, and the remaining fourth part to be divided between the Company and Government in the proportion which the gross earnings of the Company's undertaking, exclusive of the Northern section of the East Coast (State) railway, bear to the gross earnings of the latter section.

Rates and fares.—Certain maxima and minima have been fixed within which the Company is permitted to vary rates. The Madras Railway Company has the power to quote through rates in the direction of Madras from Bengal-Nagpur railway stations between Cuttack and Waltair. The Bengal-Nagpur Railway Company similarly has power to quote rates from Madras railway stations, Tadepalli and Cuttack, in the direction of Calcutta.

Statistics of working—See page 115.

1 (b) Jabulpore-Gondia extension, Bengal-Nagpur railway (2' 6" gauge)—**Details of construction—**

The open mileage of the Jabulpore-Gondia extension amounts to 245.05 miles, which may be divided into main line (Jabulpore to Gondia), 140.94 miles, and branches, 104.11 miles. There are still 13.48 miles (Pench Valley railway) and 32.14 miles (Mandla branch), under construction. The construction of the line was sanctioned in 1901 and it was opened in July 1904.

Permanent-way.—The permanent-way consists of 41-lb. flat-footed steel rails on s&l sleepers.

Ballast.—The line is ballasted with stone, except between Seoni and Chhindwara where good black basalt has been used.

Fencing.—Only important station yards are fenced.

Curves.—The sharpest curve is of 409 feet radius.

Gradients.—The ruling gradient is 1 in 80.

Terms of contracts—

The line is an integral part of the Bengal-Nagpur railway and is worked under the contracts relating to that railway.

Statistics of working—See page 115.

1 (c) Raipur-Dhamtari branch, Bengal-Nagpur railway (2' 6" gauge)—**Details of construction—**

This branch is 56.94 miles in length and consists of the main line (Raipur to Dhamtari), 45.74 miles, and the branch (Abhanpur to Rajim), 11.20 miles. It was sanctioned in 1897 and opened in 1900.

Permanent-way.—The line is laid with 31-lb. flat-footed steel rails on s&l sleepers.

Ballast.—Moorum or sand and stone in a few cuttings.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 409 feet radius, at Raipur station.

Gradients.—The ruling gradient of the line is 1 in 200.

Terms of contracts—

The line is an integral part of the Bengal-Nagpur railway and is worked under the contracts relating to that railway.

Statistics of working.—See page 115.

History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 1 Sub-heads (a) to (g) BENGAL-NAGPUR RAILWAY SYSTEM—contd.

Statistics of working—

TABLE I. [BENGAL-NAGPUR RAILWAY, INCLUDING THE NORTHERN SECTION OF THE EAST COAST (STAFF) RAILWAY, THE JUBBULPORE-GONDIA EXTENSION AND THE RAIPUR-DHAMTARI BRANCH]								TABLE II.							
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per- cent- age on cap- ital out- lay.	Interest.	Com- pany's share of Net earn- ings.*	Gain or loss to the State.	Nagpur-Chattisgarh, 3' 3 3/4".		Katni-Umaria, 5' 6".		(a) Bengal-Nagpur, 5' 6".		(b) & (c) Jubbulpore- Gondia exten- sion and Rai- pur-Dhamtari branch, 2' 6".	
								Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.	...	Rs.	Rs.	Rs.	Rs.		Rs.		Rs.		Rs.	
1879	28,62,990	...	...	...	...	83,911	...	...	...	...	...	...	...	...	...
1880	55,49,511	1,03,952	28,215	0 51	1,58,504	...	-83,911	...	51	79 54	...	...	...	...	...
1881	73,65,710	2 81,529	69,056	0 90	2,62,932	...	-1,30,589	...	87	76 53	...	...	...	...	...
1882	90,64,388	6,04,386	1,69,171	2 09	3, 9,907	...	-1,96,876	...	114	68 70	...	...	...	...	...
1883	96,43,590	13,20,021	6,83,660	7 09	3,73,283	...	-1,50,793	...	170	48 19	...	...	...	...	...
1884	1,06,34,112	13,23,014	6,58,030	6 19	4,24,407	...	+3,10,577	...	...	...	...	...	...	...	...
1885	1,50,66,406	14,11 889	4,93,575	3 25	5,86,281	...	+2,33,670	...	171	57 82	...	...	...	...	...
1886	1,81,70,455	14,24,521	5,33,511	2 94	7,29,511	...	-92,766	...	183	65 12	...	...	...	...	...
1887	2,42,30,937	14,47,705	3,04,207	1 25	13,35,564	...	-1,96,041	...	184	62 51	37	104 35	...	...	...
1888	5,23,92,491	16,09,195	5,62,971	1 07	22,17,633	...	-10,32,366	...	177	59 09	41	116 41	...	...	...
1889	7,08,75,156	19,96,930	4,03,160	0 57	29,94,364	...	-16,54,362	...	...	...	...	164	67 58	...	...
1890	8,14,66,762	28,64,578	5,47,463	0 67	33,88,812	...	-25,97,201	...	...	...	...	131	80 08	...	...
1891	9,09,04,164	54,57,356	26,84,453	2 96	35,05,676	...	-28,41,389	...	...	...	...	101	80 89	...	...
1892	9,56,14,736	60,83,562	30,08,168	3 11	39,05,344	...	-8,21,225	...	...	...	...	129	50 81	...	...
1893	9,80,08,424	64,17,751	32,62,220	3 33	43,07,494	...	-8,97,179	...	...	...	...	141	50 55	...	...
1894	9,81,73,789	66 90,648	32,58,414	3 32	45,43 993	...	-11,35,574	...	...	...	...	144	49 17	...	...
1895	9,84,94,777	68,74,710	35 41,441	3 58	48,56,800	...	-13,25,579	...	...	...	...	149	51 30	...	...
1896	11,05,30,319	63,68,523	30,27,869	2 65	51,21,501	...	-18,15,356	...	...	...	...	153	48 49	...	...
1897	13,04,58,784	62,00,309	19,79 559	2 26	54,55,240	...	-18,99 635	...	...	...	...	142	54 03	...	...
1898	14,67,03,520	65,79,193	33,63,554	2 29	57,24,116	...	-21,55,681	...	...	...	...	138	51 94	...	...
1899	16,65,00,365	69,73,460	47,21,814	2 83	59,75,559	...	-20,59,332	...	...	...	...	143	51 10	...	...
1900	17,41,74,604	1,29,75 22	77,13 050	4 13	61,91,647	...	-12,54,079	...	...	...	...	152	47 96	...	...
1901	21,19,23,276	1,30,77 769	61 18,648	2 90	79,58 163	1,78,810	+12,22,413	...	...	...	...	207	40 56	...	...
1902	22,51,91,979	1,42,18 227	69,79,346	3 10	85,44 311	41,004	-20,18,325	...	...	...	...	161	52 58	25	72 13
1903	24,97,58,940	1,55,47,702	70,45,255	2 82	89,66,131	4,067	-16,96,569	...	...	...	...	178	51 09	21	77 27
1904	26,14,35,433	1,89 12,137	95,87,326	3 67	95,41,624	355	-19,21,943	...	...	...	...	178	54 63	21	61 98
1905	27,33,72,570	2,44,70,900	1,34,04,052	4 90	1,00,32,318	...	...	...	...	...	...	210	48 97	31	67 32
1906	28,40,48,582	2,69,47,181	1,41,51,252	4 97	1,03,41,779	6,73,547	+33,71,731	...	...	...	...	270	44 53	43	71 88
							+81,35,926	...	...	...	...	295	46 83	56	65 56

1 (c) Mourbhanj railway (2' 6" gauge)—

Details of construction—

This railway is 32.41 miles long. Its construction was sanctioned in 1902 and it was opened in 1905.

Permanent-way.—The line is laid with 30-lb. flat-footed steel rails on sal sleepers.

Ballast.—The line is ballasted with screened laterite, gravel and broken laterite.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 955 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Terms of contract—

The line is worked under an agreement between the Maharaja of Mourbhanj and the Bengal-Nagpur Railway Company, approved in Railway Board's letter No. 223 R.T. of the 10th March 1905.

The general conditions of the agreement are as follows :—

Government aid.—Nil. The line is the property of the Maharaja of Mourbhanj.

Currency of agreement.—The agreement is terminable on 31st December of any year on three months' previous notice.

Terms of working.—Actual cost.

Rates and fares.—To be fixed by the Company.

Statistics of working—

TABLE I.					TABLE II.	
Calendar year.					Earnings per mile per week.	Proportion of expenses to earnings.
					Rs.	
1905	6,21,895	31,494	7,422	1 19	20	76 43
1906	6,94,892	44,825	21,888	3 15	27	81 17

* Based on actual receipts and payments during the year.

† Includes the Gondia-Chanda and Purnia-Banohi railways.

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 1} _{Sub-heads (a) to (v).} **BENGAL-NAGPUR RAILWAY SYSTEM—concl'd.**

1 (d) Parlakimedi Light railway (2' 6" gauge)—

On the 20th May 1901 the Indian Railways Act, 1890 (IX of 1890), except section 135, was applied to the line. The working of this railway was taken over by the Bengal-Nagpur railway from the 1st January 1902.

Details of construction—

This railway is 24·62 miles long. Its construction was sanctioned in 1898 and it was opened in 1900. It runs from Naupada to Parlakimedi.

Permanent-way.—The line is laid with 30-lb. flat-footed steel rails on transverse wooden sleepers.

Ballast.—The line is ballasted throughout with laterite, gravel and stone.

Fencing.—Short lengths of fencing have been provided in a few places where the railway in cutting runs alongside the road.

Curves.—There are no curves of less than 1,000 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Terms of contracts—

The Parlakimedi Light railway is worked under an agreement, dated the 24th January 1905, between the Raja of Parlakimedi and the Bengal-Nagpur Railway Company.

The general conditions of the agreement are as follows:—

Government aid.—Nil. The line is the property of the Raja of Parlakimedi.

Currency of agreement.—The agreement is terminable on 31st December of any year on three months' previous notice.

Terms of working.—Actual cost.

Rules and fares.—To be fixed by the Company.

Statistics of working—

TABLE I.					TABLE II.	
Calendar year.					Earnings per mile per week	Proportion of expenses to earnings.
					Rs.	
1903		Rs. 7,10,974	Rs. 16,633	—9,265	13	155·70
1904		7,10,974	20,675	—1,301	16	108·29
1905		7,10,975	27,181	+4,481	21	83·51
1906		7,12,406	21,493	—9,703	17	145·14

1 (f) Gondia-Chanda railway (2' 6" gauge)—**Details of construction—**

This railway, which runs from Gondia to Chanda (148·65 miles), with a branch from Pauni to Nagpur (63·75 miles), total length 212·40 miles, was sanctioned in 1904 and work was started in November 1905.

1 (g) Purulia-Ranchi railway (2' 6" gauge)—**Details of construction—**

This railway, which runs from Purulia to Ranchi (72·28 miles), was sanctioned in 1905, and construction was commenced in November of that year.

Number ^{Main head 2} _{Sub-heads (a) to (v).} **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—**

Chairman.—COLONEL SIR W. S. S. BISSET, K.C.I.E., R.E.

Secretary.—COLONEL W. V. CONSTABLE, R.E.

Offices.—Gloucester House, Bishopsgate Street without, London, E.C.

Lines comprising the system.—The Bombay, Baroda and Central India railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(a) Bombay, Baroda and Central India railway	465·12	504·35	504·35
(b) Godhra-Bhilai-Nagda railway	39·23	...	141·14
(c) Nagda-Ujjain railway	...	...	34·32
(d) Pethad-Cambay railway (Anand-Tarapur section)	...	...	21·50
(e) Pethad-Cambay railway (Tarapur-Cambay section)	...	...	12·30
(f) Tapi Valley railway	155·48	...	155·48
(g) Ahmedabad-Dholka railway	33·50	...	33·50
(h) Ahmedabad-Parantij railway	54·70	...	54·70
(i) Gackwar's Mohana railway	92·63	45·84	138·47
(j) Jaipur (Siwai-Mudhopur) railway	32·18	40·65	72·83
(k) Palanpur-Deesa railway	17·28	...	17·28
(l) Rajputana-Malwa railway	1,774·36	...	1,774·36
(m) Vijapur-Kalol-Kadi railway	41·37	...	41·37
(n) Gackwar's Dabhoi railway	94·43	...	94·43
(o) Rajpipla railway	37·37	...	37·37
Total	3,046·96	86·49	3,133·45

Running powers—*Home line over foreign line —*

Dadar Junction to Carnac bridge, Great Indian Peninsula railway (for goods trains only) . . . Miles. 4·89

Foreign lines over home line:—

East Indian railway, Agra East Bank to Agra Fort (for goods trains only) . . . 1·00

Great Indian Peninsula railway at Ujjain (for passenger and goods trains) . . . 0·24

" " " Dadar Junction to Colaba (for goods trains only) . . . 7·25

" " " at Agra (for passenger and goods trains) . . . 2·89

Total . . . **11·88**

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number—^{Main head 2} Sub-heads (a) to (o). **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.**

2 (a) Bombay, Baroda and Central India railway proper (5' 6" gauge)—**Details of construction—**

The open mileage amounts to 504.35 miles, which may be divided into 389.35 miles of main line and 115 miles of branches. 251.90 miles are double line.

First sanction to the construction of the main line [Bombay (Colaba) to Wadhwan] was accorded in 1856 and the line was opened throughout in 1872.

Permanent-way.—The main line is laid with 69-lb. double-headed and 82-lb. bull-headed steel rails on creosoted pine and oval pot sleepers.

The branches are laid mostly with 69-lb. double-headed and 41½-lb., 48-lb., 50-lb. and 75-lb. flat-footed steel rails on oval pot and wooden sleepers.

Ballast.—The line is mostly ballasted with broken stone, gravel and shingle.

Fencing.—The line is fenced throughout except the Patri branch.

Curves.—The sharpest curve on the main line and on the Godhra branch is of 1,500 feet radius, on the Patri branch of 2,865 feet radius, and on the Godhra-Baroda Chord of 1,910 feet radius.

Gradients.—The ruling gradient on the greater part of the main line is 1 in 500, but there are short lengths of 1 in 200 and of 1 in 100 at the approaches to major bridges. On the Godhra branch the ruling grade is 1 in 200, except for a short length at the Mahi low level bridge where it is 1 in 80; on the Patri branch and the Godhra-Baroda Chord it is 1 in 300, except for short lengths of 1 in 200 on the latter.

Terms of contracts—

Consequent upon the determination, by purchase of the Company's undertaking, of the then existing contracts the railway is temporarily with effect from the 1st January 1906, being worked under the terms of a provisional contract dated the 27th December 1905, pending the execution of a new contract for a term of years, between the Secretary of State and the Bombay, Baroda and Central India Railway Company.

Statistics of working—

TABLE I.

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Guaranteed interest (converted at current rates of exchange up to 1905).	Company's share of net earnings (arrived at under terms of contract).	Gain or loss to the State.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.
1879	8,54,16,162	71,52,788	32,13,354	8.76	43,69,254	—	—11,55,900
1880	8,47,31,626	82,44,876	47,31,654	5.58	43,69,254	5,83,846	—8,02,293
1881	8,66,45,448	97,45,133	56,78,755	6.55	43,69,254	8,30,798	+4,78,703
1882	8,75,89,091	1,01,76,190	50,15,619	5.73	43,07,734	8,06,346	—98,461
1883	8,89,91,377	1,19,22,209	67,16,067	7.54	43,38,189	11,44,829	+12,33,049
1884	9,02,69,608	1,21,95,590	68,87,562	7.63	49,99,341	13,17,768	+5,70,458
1885	9,22,58,636	1,31,40,336	74,01,987	8.02	52,35,189	14,57,541	+7,89,257
1886	9,16,82,002	1,35,05,635	78,73,228	8.50	55,87,410	16,97,985	+5,87,803
1887	9,32,12,200	1,21,64,856	69,98,127	7.50	57,17,318	12,56,055	+24,754
1888	9,45,87,848	1,27,33,933	70,48,164	7.45	60,29,893	12,68,879	—2,50,608
1889	9,49,45,797	1,32,34,371	75,41,081	7.94	61,10,257	14,86,390	—55,566
1890	9,53,16,045	1,29,40,370	74,23,195	7.79	54,66,227	14,22,120	+5,34,848
1891	9,55,86,799	1,41,37,769	82,25,120	8.60	58,61,996	18,06,348	+5,56,776
1892	9,55,23,735	1,42,44,478	81,30,959	8.51	65,57,945	17,86,755	—2,18,741
1893	9,62,67,602	1,50,96,045	95,78,044	9.95	66,44,227	23,09,537	+4,21,280
1894	9,77,45,855	1,59,48,484	1,00,70,974	10.30	78,09,071	27,35,713	—2,73,810
1895	9,97,90,965	1,75,53,067	1,09,87,063	10.96	77,03,258	33,37,610	+96,186
1896	10,31,57,107	1,62,03,933	89,00,862	8.60	73,03,618	20,78,128	—4,80,979
1897	10,63,10,220	1,42,61,293	64,70,202	6.09	69,38,853	8,51,545	—14,18,188
1898	10,85,60,144	1,58,62,726	87,42,205	8.05	67,87,071	19,49,477	+5,657
1899	11,40,78,658	1,74,65,045	92,00,365	8.15	67,46,668	21,68,922	+3,74,775
1900	11,60,94,044	1,75,98,486	82,28,633	7.08	68,35,449	15,68,577	—1,75,394
1901	11,95,61,022	1,59,88,796	87,53,769	7.32	70,04,569	18,11,800	—62,670
1902	12,18,78,965	1,57,43,536	79,87,622	6.51	71,28,187	12,93,644	—4,84,809
1903	12,37,88,639	1,69,63,028	84,35,201	6.87	72,59,871	15,12,518	—2,77,198
1904	12,44,90,478	1,78,23,883	98,87,312	7.54	73,86,912	18,91,186	+1,09,264
1905	12,52,43,897	1,98,52,065	1,08,90,134	8.70	73,82,579	26,03,040	+9,04,506
1906	12,55,08,073	1,99,81,754	1,05,39,688	8.40	72,58,353	7,80,243	+25,01,087

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number—Main head 2 BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.
Sub-heads (a) to (c).

2 (a) Bombay, Baroda and Central India railway proper (5' 6" gauge)—concl'd.

Statistics of working—concl'd.

TABLE II.

Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.	Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.	Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.	Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.			Rs.			Rs.			Rs.	
1860 . .	49	70.17	1872 . .	290	59.97	1884 . .	509	42.95	1896 . .	676	45.07
1861 . .	73	54.97	1873 . .	260	59.23	1885 . .	518	43.11	1897 . .	595	54.68
1862 . .	94	50.14	1874 . .	565	52.12	1886 . .	564	41.12	1898 . .	662	44.89
1863 . .	138	49.51	1875 . .	285	54.41	1887 . .	508	41.89	1899 . .	729	46.81
1864 . .	156	85.33	1876 . .	296	54.74	1888 . .	532	44.11	1900 . .	734	52.50
1865 . .	223	63.83	1877 . .	345	41.97	1889 . .	552	42.44	1901 . .	665	44.06
1866 . .	278	71.93	1878 . .	298	46.61	1890 . .	540	42.06	1902 . .	659	49.00
1867 . .	291	66.56	1879 . .	309	46.97	1891 . .	590	41.23	1903 . .	753	49.46
1868 . .	297	73.66	1880 . .	355	42.57	1892 . .	594	42.92	1904 . .	718	47.12
1869 . .	307	74.32	1881 . .	423	41.04	1893 . .	630	36.55	1905 . .	780	43.78
1870 . .	327	60.54	1882 . .	427	50.76	1894 . .	665	36.85	1906 . .	809	47.27
1871 . .	300	59.98	1883 . .	497	43.10	1895 . .	732	37.69			

2 (b) Godhra-Rutlam-Nagda railway (5' 6" gauge)—

Details of construction—

This railway is 141.14 miles long. Its construction was sanctioned in 1890 and it was opened throughout in 1896.

Permanent-way.—The permanent-way consists of 75-lb. flat-footed steel rails on transverse steel, deodar and creosoted pine sleepers.

Ballast.—The line is ballasted throughout with broken stone and gravel.

Fencing.—There are 76½ miles of fencing. The rest of the line is unfenced except in station yards.

Curves.—The sharpest curve is of 1,000 feet radius.

Gradients.—The ruling gradient is 1 in 200, with short lengths of 1 in 100, and from 1 in 101 to 1 in 150, between Godhra and Jekot.

Terms of contracts—

This is a State line and is worked as a part of the Rajputana-Malwa railway under the contracts and conditions relating to that railway.

Statistics of working—

Included with the Rajputana-Malwa railway.

2 (c) Nagda-Ujjain railway (5' 6" gauge)—

Details of construction—

This railway is 34.32 miles long. Its construction was sanctioned in 1894, and it was opened throughout in 1896.

Permanent-way.—The permanent-way consists of 75-lb. flat-footed steel rails on cast iron oval pot sleepers.

Ballast.—The line is ballasted with broken stone.

Fencing.—Only station yards are fenced.

Curves.—The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient is 1 in 200.

Terms of contracts—

The line is owned by the Gwalior State and worked under the following:—

Agreement of—15th July 1896 (between His Highness the Maharaja Scindia of Gwalior and the Bombay, Baroda and Central India Railway Company) for working.

Contract of—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The general conditions are as follows:—

Government aid.—Nil. The line is the property of the Gwalior State.

Currency of agreement.—

Power to determine agreement.—

} The agreement may be terminated at any time on one year's notice from either party expiring on the 30th June or 31st December in any year.

Terms of working.—The railway is debited with a share of the working expenses of the system (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of an amount bearing the same percentage of gross receipts as obtains for similar expenditure on the

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 112.]

Number ^{Main head 2}_{Sub-heads (a) to (c)} **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

2 (c) Nagda-Ujjain railway (5' 6" gauge)—*concl'd.***Terms of contracts—*concl'd.***

Bombay, Baroda and Central India railway) excluding 2' and 2' 6" gauge lines, in proportion to the total earnings of the Nagda-Ujjain railway.

Rates and fares.—Conform generally with those in force on the Godhra-Rutlam-Nagda railway.

Statistics of working—

TABLE I.					TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1895	5,33,600	...	...	...	...	...
1896	20,71,251	40,701	17,762	0·86	49	56·36
1897	22,19,919	1,04,639	47,756	2·15	58	54·96
1898	22,31,596	1,20,627	71,509	3·20	73	44·83
1899	22,34,346	1,47,175	77,732	3·48	83	47·18
1900	22,29,753	2,51,783	1,20,956	5·42	141	51·96
1901	22,31,982	1,12,366	67,208	3·01	63	40·19
1902	22,39,063	1,57,211	85,851	3·83	88	45·39
1903	22,41,230	1,20,951	62,949	2·81	68	47·95
1904	22,41,231	1,23,854	66,441	2·96	69	46·27
1905	22,40,441	1,71,435	99,907	4·46	96	41·72
1906	22,40,441	1,71,491	91,060	4·06	96	46·90

2 (d) Petlad-Cambay railway (Anand-Tarapur section) (5' 6" gauge)—**Details of construction—**

This section of the Petlad-Cambay railway is 21·50 miles long. Its construction was sanctioned in 1888, and it was opened throughout in 1901.

Permanent-way.—The permanent-way consists of 66½-lb. flat-footed steel rails on steel sleepers from Anand to Petlad and on crosotied pine sleepers from Petlad to Tarapur.

Ballast.—The line is ballasted with gravel.

Fencing.—Thirteen miles, between Anand and Petlad, are fenced. The rest of the line is unfenced, except in station yards.

Curves.—The sharpest curve is of 1,433 feet radius.

Gradients.—The ruling gradient is 1 in 200.

Terms of contracts—

The line is owned by the Baroda State and worked under the following :—

Agreement of—5th May 1890 (between the Government of His Highness the Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company) for working.

Contract of—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The general conditions are as follows :—

Government aid.—Nil. The line is the property of the Baroda State.

Currency of agreement.— } Either party may terminate the agreement at any time on giving one year's
Power to determine agreement.— } notice.

Terms of working.—The railway is debited with a share of the working expenses of the system (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of an amount bearing the same percentage of gross receipts as obtains for similar expenditure on the Bombay, Baroda and Central India railway) excluding 2' and 2' 6" gauge lines, in proportion to the total earnings of the Petlad-Cambay, Gaekwar's Mehsana and Vijapur-Kalol-Kadi railways.

Rates and fares.—To be fixed from time to time by the Company with the approval of His Highness' Government and, as far as possible, to conform with those generally in force on the Bombay, Baroda and Central India railway.

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 2} _{Sub-heads (a) to (e)} **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.**

2 (d) Petlad-Cambay railway (Anand-Tarapur section) (5' 6" gauge)—concl'd.

Statistics of working—

TABLE I.					TABLE II.			
CALENDAR YEAR.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent on capital outlay.	GAEKWAR'S PETLAD, 5' 6".		PETLAD-CAMBAY (ANAND-TARAPUR SECTION), 5' 6".	
	Rs.	Rs.	Rs.	•	Earnings per mile per week.	Proportion of expenses to earnings.	Earnings per mile per week.	Proportion of expenses to earnings.
1889	11,030	...	...	...	...	...	...	...
1889	4,71,822	...	...	...	...	...	...	...
1890	6,17,922	32,619	20,870	3.22	71	36.08	...	...
1891	7,10,118	59,113	36,346	5.12	85	38.51	...	...
1892	7,11,081	61,243	34,757	4.89	88	43.25	...	...
1893	7,12,768	62,953	40,027	5.70	92	36.47	...	...
1894	7,33,182	69,668	41,037	6.09	100	36.79	...	...
1895	7,23,139	73,891	46,534	6.44	106	36.96	...	...
1896	7,23,616	1,17,540	82,847	11.45	169	29.52	...	...
1897	7,55,730	64,737	33,946	4.49	93	47.56	...	...
1898	7,49,077	51,121	28,156	3.76	74	44.92	...	...
1899	7,52,139	70,668	39,312	5.22	102	41.37	...	...
1900	7,52,097	88,481	41,713	5.55	127	52.86	...	...
1901	11,56,381	93,233	51,709	4.36	...	...	101	44.47
1902	11,85,930	1,03,951	56,818	4.79	...	...	95	46.37
1903	11,48,092	98,451	50,289	4.38	...	...	88	48.92
1904	11,46,552	1,20,944	64,876	5.66	...	...	108	46.37
1905	11,31,273	1,40,463	81,966	7.25	...	...	126	41.65
1906	11,30,875	1,39,209	73,634	6.51	...	...	124	47.11

2 (e) Petlad-Cambay railway (Tarapur-Cambay section) (5' 6" gauge)—

Details of construction—

This section of the Petlad-Cambay railway is 12.30 miles long. It was sanctioned in 1899 and was opened to Cambay in 1901.

Permanent-way.—The permanent-way consists of 66½-lb. flat-footed steel rails on creosoted pine sleepers.

Ballast.—The line is ballasted with gravel.

Fencing.—Only station yards are fenced.

Curves.—The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient is 1 in 600, with a short bit of 1 in 200 between Sayama and Cambay.

Terms of contract—

The line is owned by the Cambay State and worked under—

Agreement of—17th May 1902 (between the Cambay State and the Bombay, Baroda and Central India Railway Company) for working.

The general conditions of the agreement are as follows :—

Government aid.—Nil. The line is the property of the Cambay State.

Currency of agreement.—

Power to determine agreement.— } The agreement may be terminated at any time on one year's notice from either party, expiring on the 30th June or 31st December in any year.

Terms of working.—The railway is debited with a share of the working expenses of the system (which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of an amount bearing the same percentage of gross receipts as obtains for similar expenditure on the Bombay, Baroda and Central India railway) excluding 2' and 2' 6" gauge lines, in proportion to the total earnings of the Tarapur-Cambay railway.

Rates and fares.—To be fixed from time to time by the Company with the approval of the Cambay State, and as far as possible, to conform with those generally in force on the Bombay, Baroda and Central India railway.

Statistics of working—

TABLE I.					TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1901	7,49,676	12,011	5,950	0.79	40	50.46
1902	7,49,676	25,497	13,622	1.81	45	48.57
1903	7,49,676	25,151	12,808	1.71	44	49.10
1904	7,08,728	32,199	17,276	2.25	57	46.95
1905	8,06,482	33,638	19,603	2.43	59	41.72
1906	8,11,255	34,531	18,265	2.25	55	47.11

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 2 **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.**
Sub-heads (a) to (o).

2 (f) Tapti Valley railway (5' 6" gauge)—**Details of construction—**

This railway connects Kankra Khari, a station on the main line of the Bombay, Baroda and Central India railway, with Amalner. It is 155.48 miles long. It was opened in 1900.

Permanent-way.—The permanent-way consists of 70-lb. flat-footed steel rails on wooden sleepers.

Ballast.—The line is ballasted throughout with stone.

Fencing.—Only station yards and important level crossings are fenced.

Curves.—The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient is 1 in 200.

Terms of contracts—

The line is owned by the Tapti Valley Railway Company and worked under the following contracts:—

Contracts of—28th August 1896 (between the Secretary of State and the Tapti Valley Railway Company) for construction.

30th October 1896 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) for maintenance and working.

1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The general conditions of the contracts are as follows:—

Government aid.—A rebate is allowed up to 10 per cent. of the gross earnings of the Bombay, Baroda and Central India and Rajputana-Malwa railways from traffic interchanged with the Tapti Valley railway, so as to make up an amount equal to interest for the year at the rate of 4 per cent. per annum on the actual capital expenditure, plus a sum of Rs. 6,000 per annum towards the Company's office expenses and expenses of management. Land in British territory was provided free.

Currency of contracts.—Government may, by giving 12 months' notice, determine the contracts on the 31st December 1921, or at the end of any subsequent period of 10 years, paying the Company in rupees a sum equal to 25 times the average yearly net earnings of the Company during the last preceding five years, provided that such sum shall not exceed by more than 20 per cent. the total capital expenditure of the Company or be less than such capital expenditure; or Government may determine it on the 31st December 1950, paying the Company in rupees an amount equal to the total capital expenditure.

Power of Company to surrender contract.—Nil.

Terms of working.—Government undertake to construct (from funds supplied by the Company), work and maintain the line through State or other agency, the necessary rolling-stock being supplied by the working agency. The general working expenses of the system, excluding the 2' and 2' 6" gauge lines, are divided in proportion to the gross earnings of the component parts, the Tapti Valley railway being debited with the share thus arrived at (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year), subject to a maximum charge of 44 per cent. of its gross earnings for the year. The residue of the gross earnings is payable to the Tapti Valley Railway Company.

Rates and fares.—To be arranged from time to time between Government and the working agency within the maximum and minimum rates and fares for the time being in force on the Bombay, Baroda and Central India railway.

Statistics of working—

TABLE I.								TABLE II.		REMARKS.
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Rebate from B., B. & C. I. Ry.	Total income.	Per cent. of total income on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.	
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.		
1896	8,300	The net earnings for 1896, 1899 and 1st-half of 1900 were credited to interest on capital, and those for 2nd-half of 1900 (including rebate) were treated as a set off against the charge to capital for interest in the accounts for 1st-half of 1901.
1897	20,96,291	...	...	...	...	...	...	...	...
1898	60,45,413	2,836	...	...	...	...	...	18	48.70
1899	1,21,09,133	2,42,593	...	...	...	...	...	71	47.40
1900	1,28,31,291	6,68,475	...	...	...	...	...	84	44.00
1901	1,29,18,730	6,00,553	3,42,243	2.65	33,226	3,75,469	2.90	74	43.01	Excluding interest, Rs. 4,488, on the capital cost of works at Amalner junction, the percentage of income on capital outlay in 1903 was 4.00.
1902	1,29,70,581	8,26,485	4,64,242	3.57	45,196	5,08,438	3.92	102	43.95	
1903	1,30,02,400	8,62,753	4,83,142	3.72	40,258	5,23,400	4.03	107	44.00	
1904	1,30,77,018	6,58,740	3,68,894	2.82	28,441	3,97,335	3.04	81	44.00	
1905	1,30,83,629	10,11,222	5,86,921	4.49	2,928	5,89,849	4.51	125	41.95	
1906	1,30,82,853	11,24,712	6,35,460	4.86	...	6,35,460	4.86	140	44.00	

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 2} _{Sub-heads (a) to (c)}. BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.2 (g) Ahmedabad-Dholka railway (3' 3 $\frac{3}{4}$ " gauge)—

Details of construction—

This railway connects Sabarmati, a station on the Rajputana-Malwa railway, with Dholka. It is 33.50 miles long. Its construction was sanctioned in 1901 and it was opened in 1903.

Permanent-way.—The permanent-way consists of 41 $\frac{1}{2}$ -lb. flat-footed steel rails on deodar sleepers.

Ballast.—Ballast is provided only at points and crossings, and for 100 feet on each side of bridges and level crossings.

Fencing.—Only station yards are fenced.

Curves.—The sharpest curve is of 1,146 feet radius.

Gradients.—The ruling gradient is 1 in 150.

Terms of contracts—

The railway is worked under the following contracts :—

Contracts of—25th March 1902 (between the Secretary of State and the Ahmedabad-Dholka Railway Company) for construction.

18th July 1902 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) for working.

The general conditions of the contracts are as follows :—

Government aid.—A rebate is allowed up to 10 per cent. of the gross earnings of the Bombay, Baroda and Central India and Rajputana-Malwa railways from traffic interchanged with the Ahmedabad-Dholka railway so as to make up an amount equal to interest for the year at the rate of 4 per cent. per annum on the actual capital expenditure *plus* Rs. 5,000 per annum towards the Company's office expenses and expenses of management. Land provided free.

Currency of contracts.—Government may, by giving 12 months' notice, determine the contracts on the 30th June 1922 or at the end of any subsequent period of ten years, paying the Company in rupees a sum equal to 25 times the average yearly net earnings of the Company during the last preceding three years, but not exceeding by more than 20 per cent. the total capital expenditure of the Company, nor being less than such capital expenditure.

Power of Company to surrender contracts.—Nil.

Terms of working.—The railway is debited with a share of the working expenses of the system (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year) excluding the 2' and 2' 6" gauge lines, proportionate to its total earnings, but not exceeding 44 per cent. of its gross earnings for the year. The net earnings thus arrived at are payable to the Ahmedabad-Dholka Railway Company.

Rates and fares.—To be arranged from time to time between Government and the working agency within the maxima and minima rates and fares in force on the undertaking.

Statistics of working—

TABLE I.							TABLE II.		
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Rebate from Bombay, Baroda and Central India railway.	Total income.	Per cent. of total income on capital outlay.	Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1903	10,13,420	64,261	35,986	3.55	...	35,986	3.55	45	44.00
1904	10,17,308	99,044	55,165	5.45	...	55,165	5.45	57	44.00
1905	10,44,935	98,214	57,203	5.47	...	57,203	5.47	58	41.76
1906	10,83,722	1,09,743	56,418	5.21	...	56,418	5.21	58	44.00

2 (h) Ahmedabad-Parantij railway (3' 3 $\frac{3}{4}$ " gauge)—

Details of construction—

This railway connects Ahmedabad, a station on the Bombay, Baroda and Central India railway, with Idar Road. It is 51.70 miles long. Its construction was sanctioned in 1896 and it was opened in 1897.

Permanent-way.—The permanent-way consists of 41 $\frac{1}{2}$ -lb. flat-footed steel rails on creosoted pine and deodar sleepers.

Ballast.—The line is ballasted with kunkur, sand and stone.

Fencing.—Only station yards are fenced.

Curves.—The sharpest curve is of 1,146 feet radius.

Gradients.—The ruling gradient is 1 in 150.

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 2} _{Sub-heads (a) to (c)} **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.**

2 (h) Ahmedabad-Parantij railway (3' 3½" gauge)—contd.**Terms of contracts—**

The Ahmedabad-Parantij railway is worked under the following contracts:—

Contracts of—13th March 1896 (between the Secretary of State and the Ahmedabad-Parantij Railway Company) for construction.

4th June 1896 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) for working.

1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The general conditions of the contracts are as follows:—

Government aid.—A rebate is allowed up to 10 per cent. of the gross earnings of the Bombay, Baroda and Central India and Rajputana-Malwa railways from traffic interchanged with the Ahmedabad-Parantij railway so as to make up an amount equal to interest for the year at the rate of 4 per cent. per annum on the actual capital expenditure, plus Rs. 5,000 per annum towards the Company's office expenses and expenses of management. Land provided free.

Currency of contracts.—Government may, by giving 12 months' notice, determine the contracts on the 31st December 1917 or at the end of any subsequent period of ten years, paying the Company in rupees a sum equal to 25 times the average yearly net earnings of the Company during the last preceding five years, but not exceeding by more than 20 per cent. the total capital expenditure of the Company, nor being less than such capital expenditure, or on the 31st December 1946 paying the Company in rupees an amount equal to the total capital expenditure.

Power of Company to surrender contracts.—Nil.

Terms of working.—The railway is debited with a share of the working expenses of the system (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year) excluding the 2' and 2' 6" gauge lines, proportionate to its total earnings but not exceeding 41 per cent. of its gross earnings for the year. The net earnings thus arrived at are payable to the Ahmedabad-Parantij Railway Company.

Rates and fares.—To be arranged from time to time between Government and the working agency within the maximum and minimum rates and fares in force on the Rajputana-Malwa railway.

Statistics of working—

TABLE I.								TABLE II.	
Calendar year.	Capital outlay to end of each year	Gross earnings.	Net earnings.	Percentage on capital outlay.	Rebate from B., B. & C. I. Ry.	Total income.	Per cent. of total income on capital outlay.	Earnings per mile per week.	Pro. of exp. to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1896	13,12,752	...	...	...	...	...	...	...	...
1897	19,42,211	69,060	36,665	1.89	...	36,665	1.89	46	46.92
1898	19,42,971	1,19,790	8,836	4.42	...	85,836	4.42	37	42.70
1899	19,49,616	2,10,334	1,21,687	6.24	...	1,21,687	6.24	74	42.33
1900	19,55,305	2,65,105	1,55,952	7.95	...	1,55,952	7.95	93	41.17
1901	19,49,355	1,77,438	99,365	5.10	...	99,365	5.10	62	44.00
1902	19,70,012	1,79,794	1,00,685	5.11	...	1,00,685	5.11	63	40.04
1903	19,88,839	1,50,112	84,063	4.45	...	84,063	4.45	59	44.00
1904	19,89,045	1,86,227	1,04,287	5.24	...	1,04,287	5.24	65	44.00
1905	19,91,753	1,98,713	1,15,469	5.80	...	1,15,469	5.80	70	41.69
1906	19,98,023	2,20,364	1,23,727	6.19	...	1,23,727	6.19	78	44.00

2 (i) Gaekwar's Mehsana railway (3' 3½" gauge)—**Details of construction—**

The total length of this railway is 92.63 miles. It consists of three branches, Mehsana to Kheralu, 27.73 miles, Mehsana to Viamgam, 40.21 miles, and Mehsana to Patan, 24.69 miles. The first branch was opened throughout in 1888 and the other two in 1891.

Besides the above 45.84 miles are under construction.

Permanent-way.—The Kheralu and Viamgam branches are laid with 41½-lb. flat-footed steel rails on transverse steel and deodar sleepers. The Mehsana-Patan section is laid with 40-lb. iron rails on deodar sleepers, except in station yards and for the first 3 miles which are laid with 41½-lb. steel rails.

Ballast.—The line between Mehsana and Kheralu is ballasted with sand and the rest with kunkur.

Fencing.—The whole line, except 41½ miles which are fenced by wire, was originally fenced with cactus; but this has in several places been entirely destroyed by floods and locusts and what remains is much broken up.

Curves.—The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient is 1 in 150.

Terms of contracts—

The railway is the property of the Baroda State and is worked under the following:—

Agreement of—1st July 1891 (between the Government of His Highness the Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company) for working.

Contract of—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The terms of working are the same as on the Petlad-Cambay railway (Anand-Tarapur section).

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 112.]

Number Main head 2 BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*
Sub-heads (a) to (o)2 (i) Gackwar's Mehsana railway (3' 3½" gauge)—*concl'd.* •

Statistics of working—

TABLE I.					TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	
1887	13,55,492	27,890	5,564	0.41	33	80.05
1888	9,16,565	47,502	16,672	1.82	43	64.90
1889	11,18,446	55,290	20,348	1.82	37	61.82
1890	25,44,310	59,246	23,308	0.92	41	60.66
1891	29,04,050	1,91,247	1,05,801	3.64	49	45.53
1892	29,71,610	2,58,063	1,53,005	5.15	54	40.92
1893	30,26,752	3,36,859	1,98,250	6.55	70	41.12
1894	30,94,578	3,79,972	2,36,387	7.64	79	37.79
1895	32,55,044	3,38,114	2,02,440	6.22	70	40.18
1896	32,61,448	4,23,283	2,71,262	8.32	88	35.91
1897	32,63,000	3,39,125	1,18,358	3.63	79	46.58
1898	32,82,612	3,16,491	1,94,052	6.07	72	42.55
1899	32,83,612	3,76,160	2,16,654	6.60	79	42.40
1900	33,01,950	4,28,515	2,38,754	7.17	89	44.75
1901	33,48,911	3,92,227	2,15,111	6.42	81	45.16
1902	33,61,329	3,74,515	1,98,977	5.92	78	46.87
1903	33,78,132	3,47,083	1,77,466	5.25	72	48.87
1904	33,95,678	3,82,249	2,04,906	6.06	79	46.39
1905	34,36,885	4,52,184	2,62,904	7.65	94	41.86
1906	42,78,358	4,20,777	2,24,124	5.24	87	46.74

2 (j) Jaipur (Siwai Madhopur) railway (3' 3½" gauge)—

Details of construction—

From Jaipur the Rajputana-Malwa railway is utilized as far as Sanganer, from which station this railway actually starts. The open mileage (Sanganer to Nawai) is 32.18 miles. It was sanctioned in 1897 and was opened in 1905.

There are 40.65 miles still under construction.

Permanent-way.—The permanent-way consists of 41½-lb. flat-footed steel rails laid on deodar sleepers.

Ballast.—The line is ballasted with stone.

Fencing.—The line is unfenced except at stations and at points where the line crosses the main road.

Curves.—The sharpest curve is of 2,865 feet radius.

Gradients.—The limiting gradient is 1 in 250 in the down direction and 1 in 200 in the up direction.

Terms of contract—

The railway is owned by the Jaipur State and worked by the Bombay, Baroda and Central India Railway Company under terms which are at present under consideration.

Statistics of working—

TABLE I.					TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1905	18,34,338	12,290	6,779	0.37	52	44.88
1906	21,14,507	68,943	36,617	1.73	41	46.89

2 (k) Palanpur-Deesa railway (3' 3½" gauge)—

Details of construction—

This railway is 17.28 miles long. Its construction was sanctioned in 1892 and it was opened in 1893.

Permanent-way.—The permanent-way consists of 40-lb. flat-footed iron rails, except in station yards and the first 3 miles of line which are laid with 41½-lb. steel rails. The rails are laid on Denham-Olpherts' plate, cast iron pot, and steel dish cover sleepers.

Ballast.—The line is ballasted with stone and sand.

Fencing.—The line is fenced throughout.

Curves.—The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient is 1 in 150.

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 2 **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.**
Sub-heads (a) to (e).

2 (k) Palanpur-Deesa railway (3' 3½" gauge)—concl'd.**Terms of contracts—**

The railway is worked under—

Terms contained in letter No. 44 Ry., dated the 30th March 1892, from the Government of India to the Secretary of State, and letter No. 62 Ry., dated the 23rd June 1892, from the Secretary of State to the Government of India.

Contract of—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The general conditions are as follows:—

Government aid.—The line is owned jointly by Government and the Palanpur Durbar.

Currency of contract.—The contract is coterminous with the Company's contract for working the Rajputana-Malwa railway. In the event of the line being extended, Government can terminate the contract on giving the Company six months' notice.

Power of Company to surrender contract.—Nil

Terms of working.—The railway is debited with a share of the working expenses of the system, excluding the 2' and 2' 6" gauge lines, in proportion to the total earnings of the Palanpur-Deesa railway, the net earnings thus arrived at in any half-year being divided between Government and the Palanpur Durbar in proportion to the capital provided by each after excluding from the Government capital the sum of Rs. 25,117, the extra expenditure incurred in providing a 5' 6" gauge sub-structure.

Rates and fares.—Same as on the Rajputana-Malwa railway.

Statistics of working—

Calendar year.	TABLE I.										TABLE II.	
	CAPITAL.		Gross earnings.	NET EARNINGS.		PER CENT. ON CAPITAL OUTLAY.		Interest on Government capital.	Gain or loss to the Government.	Earnings per mile per week.	Pro: of exp: to earnings.	
	Contributed by the Palanpur Durbar.	Contributed by Government.		Attributable to the Durbar.	Attributable to the Government.	On capital contributed by the Durbar.	On capital contributed by Government.					
Rs.	Rs.	Rs.	Rs.	Rs.			Rs.	Rs.	Rs.			
1892	20,000	16,746	...	...	...	...	...	1,081	-1,031	...	...
1893	1,85,000	1,78,953	4,436	1,335	1,110	0.72	0.63	5,371	-4,261	38	44.87	
1894	1,85,000	2,14,601	37,544	11,791	11,791	6.14	5.49	8,783	+2,999	42	38.85	
1895	1,85,000	2,15,374	38,182	11,333	11,512	6.13	5.35	8,378	+3,134	42	40.17	
1896	1,85,000	2,32,746	51,619	14,101	15,972	7.62	6.47	9,119	+5,923	57	48.50	
1897	1,85,000	2,33,264	43,264	10,883	12,243	5.88	5.25	9,305	+2,938	48	46.85	
1898	1,85,000	2,33,264	38,149	10,331	11,628	5.59	4.99	9,331	+2,297	43	42.50	
1899	1,85,000	2,33,264	44,628	12,102	13,618	6.54	5.84	9,330	+4,288	50	42.37	
1900	1,85,000	2,33,264	47,669	14,238	12,616	7.70	5.41	9,330	+3,286	58	43.66	
1901	1,85,000	2,33,264	36,805	9,375	10,548	5.07	4.52	9,330	+1,218	41	45.67	
1902	1,85,000	2,36,786	33,690	8,329	8,330	4.50	3.52	9,108	-1,078	37	47.01	
1903	1,85,000	2,37,069	29,731	7,423	7,898	4.01	3.33	9,132	-1,534	33	48.47	
1904	1,85,000	2,37,069	29,185	7,280	8,340	3.94	3.52	9,474	-1,134	32	46.43	
1905	1,85,000	2,37,069	35,178	9,469	10,848	5.12	4.58	9,472	+1,376	39	42.24	
1906	1,85,000	2,39,155	40,154	9,962	11,376	5.33	4.76	9,531	+1,845	45	47.11	

2 (l) Rajputana-Malwa railway (3' 3½" gauge)—

The Maharaja Holkar lent the British Government one hundred lakhs of rupees at 4½ per cent. per annum for the construction of the Khandwa-Indore section, and is entitled to a moiety of surplus profits.

The Maharaja Scindia of Gwalior lent the British Government seventy-five lakhs of rupees at 4 per cent. per annum for the construction of the Indore-Neemuch section and the branch to Ujjain.

The Cawnpore-Achnera line was leased to the Bombay, Baroda and Central India Railway Company on the 1st October 1886, and is now treated as an integral part of the Rajputana-Malwa railway.

The Rajputana-Malwa railway system has been worked by the Bombay, Baroda and Central India Railway Company since the 1st January 1885.

Details of construction—

The open mileage of the Rajputana-Malwa railway is 1,774.36 miles. It is made up of the following sections:— (1) *Rajputana section*, main line (Delhi to Ahmedabad), 539.15 miles; Rewari-Bandikui-Phulera loop, 173.89 miles; and branches, 139.28 miles; (2) *Malwa section*, main line (Khandwa to Ajmer), 393.19 miles; branch, 14.28 miles; (3) *Cawnpore-Achnera section*, main line (Cawnpore to Achnera), 239.47 miles; branches, 12.33 miles; (4) *Rewari-Fazilka section*, 262.77 miles.

The Rajputana section was sanctioned in 1870 and was opened in 1881; the Malwa section was sanctioned in 1872, opened in 1881; the Cawnpore-Achnera section was sanctioned in 1874, opened in 1884; and the Rewari-Fazilka section was sanctioned in 1881, opened in 1885. 2.92 miles of the line are double track.

Permanent-way.—The Rajputana section is laid with 50-lb. flat-footed steel rails on deodar sleepers. The Malwa section has mixed 40-lb. iron, 41½-lb. and 50-lb. steel flat-footed rails on deodar sleepers. The Cawnpore-Achnera section has 41½-lb. and 50-lb. steel rails on deodar sleepers. The Rewari-Fazilka section has 41½-lb. steel rails on deodar sleepers.

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 112]

Number ^{Main head 2} _{Sub-heads (a) to (o)} **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*****2 (2) Rajputana-Malwa railway (3' 3½" gauge)—*contd.*****Details of construction—*concl.****Ballast.*—The line is ballasted throughout with stone, kunkur, sand and hard quartz.*Fencing.*—The total length of line fenced on the Rajputana section is 669 miles. The Malwa section is fenced for 93½ miles and at stations. The Cawnpore-Achnera section is fenced on both sides for 145½ miles on the main line, except for 7½ miles which are fenced on one side only. The Soron branch is fenced for 3½ miles and the Brindaban branch for 3½ miles. The Rewari-Bhatinda-Fazilka section is fenced for about 113½ miles and at stations. On the Rewari-Phulera section only the Narnaul station yard is fenced.*Curves.*—The sharpest curve is of 600 feet radius.*Gradients.*—The ruling gradient is 1 in 150, except on the Malwa section between Khandwa and Kalakhund where it is 1 in 100 and between Kalakhund and Patal Pani where it is 1 in 40.**Terms of contracts—**

The Rajputana-Malwa and Godhra-Rutlam-Nagda railways are worked together as one undertaking under the following contracts:—

*Contracts of—*24th September 1884.—The original contract (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) for maintaining and working the Rajputana-Malwa railway.

16th March 1888.—Contract supplemental to that of 1884 for maintaining and working the Cawnpore-Achnera railway as a part of the Rajputana-Malwa railway.

8th November 1889.—Contract supplemental to those of 1884 and 1888 for maintaining and working the Brindaban branch as a part of the Cawnpore-Achnera railway.

5th October 1893.—Supplemental to the original contract for maintaining and working the Godhra-Rutlam railway as a part of the Rajputana-Malwa railway.

1st October 1897.—Supplemental to those of 1884 and 1893 for maintaining and working the Rutlam-Nagda railway as a part of the Godhra-Rutlam railway.

1st February 1901.—Supplemental to those of 1884 and 1888 modifying the terms as to the division of working expenses.

The general conditions of the contracts are as follows:—

Government aid.—The line is the property of Government.*Currency of contracts.*—The contracts were current up to the 31st December 1905, and shall continue in force as from that date until determined in pursuance of the provisions of the provisional contract, dated the 27th December 1905, between the Secretary of State and the Bombay, Baroda and Central India Railway Company.*Power of company to surrender contracts.*—Nil.*Terms of working.*—The working expenses of the system (which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year, and a payment of Rs. 10 for every mile of line open to traffic to be made half-yearly to Government for supervision), excluding 2' and 2' 6" gauge lines, are pooled, and divided between the component parts of the system in proportion to the gross earnings of each. The net earnings thus arrived at of the Rajputana-Malwa, 3' 3½" gauge, and Godhra-Rutlam-Nagda, 5' 6" gauge, railways, are paid in full to Government.*Rates and fares.*—Maximum and minimum rates and fares have been fixed within which the Company is authorised to vary the rates.**Statistics of working—**

TABLE I (including the Godhra-Rutlam-Nagda railway).

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Company's share of net earnings.*	Gain or loss to the State.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.
1879	7,06,47,354	38,64,997	15,41,903	2.18	23,43,439	...	-13,01,536
1880	8,38,87,014	59,12,511	17,33,714	2.07	35,81,449	...	-18,47,785
1881	9,30,43,645	91,70,110	35,96,044	3.86	37,48,505	...	-1,52,461
1882	9,91,83,933	1,11,82,614	52,81,668	5.31	38,74,919	...	+14,09,749
1883	11,08,57,933	1,35,64,166	63,39,208	5.72	40,74,808	...	+22,64,400
1884	11,93,03,595	1,43,20,446	61,92,677	5.19	43,90,548	...	+18,02,129
1885	12,22,63,117	1,73,00,501	79,71,364	6.52	49,10,379	...	+30,61,585
1886	12,80,59,407	1,82,98,610	89,55,549	6.99	51,72,731	6,28,054	+81,54,764
1887	12,87,69,187	1,65,28,263	81,24,547	6.31	51,86,578	5,06,190	+24,31,779
1888	12,96,59,658	1,85,14,711	96,31,727	7.48	52,27,345	4,99,908	+89,04,474
1889	13,02,33,556	1,99,30,005	1,07,97,217	8.29	*52,48,893	8,56,110	+46,92,214
1890	13,00,01,510	1,74,28,281	86,42,525	6.65	52,61,288	6,57,951	+27,23,236
1891	13,17,20,440	2,17,89,570	1,23,17,065	9.35	53,13,844	8,78,835	+61,24,380
1892	14,34,24,072	2,24,00,454	1,32,14,774	9.21	56,14,176	13,45,703	+62,54,835
1893	14,30,06,325	2,26,33,265	1,33,25,640	9.33	57,00,808	13,24,918	+82,99,914
1894	14,72,89,588	2,51,44,200	1,54,75,312	10.51	58,77,844	15,63,148	+60,34,350
1895	15,55,56,871	2,45,42,974	1,44,02,355	9.26	59,78,006	16,21,635	+68,02,117
1896	15,03,08,348	2,16,21,002	1,13,79,807	7.57	60,63,242	9,93,351	+43,23,214
1897	14,94,51,054	1,84,74,358	1,00,97,008	6.76	60,48,581	5,09,720	+85,88,707
1898	15,03,74,730	2,23,17,315	1,19,05,991	7.91	60,77,309	9,53,967	+48,74,715
1899	15,14,26,773	2,60,94,341	1,47,30,148	9.73	60,92,638	9,92,364	+76,45,126
1900	15,31,25,211	2,91,75,054	1,60,55,050	10.48	61,35,151	21,67,610	+77,52,289
1901	15,13,58,024	2,78,62,296	1,48,89,645	9.65	61,89,498	13,785	+86,86,362
1902	15,64,35,445	2,58,96,694	1,36,25,409	8.71	62,80,315	...	+73,45,094
1903	15,78,84,717	2,27,25,664	1,12,42,360	7.18	62,84,957	5,644	+50,51,760
1904	16,17,31,083	2,33,65,289	1,21,57,833	7.52	64,55,047	...	+57,02,786
1905	16,28,49,528	2,84,44,243	1,62,39,890	9.97	64,41,437	...	+97,88,459
1906	16,65,57,367	2,80,04,905	1,47,43,580	8.85	65,99,940	...	+81,48,590

*R. and C. I. R. Co. and payment during the year.

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 2} _{Sub-heads (a) to (v)} · BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.

2(l) Rajputana-Malwa railway (3' 3½" gauge)—conold.

Statistics of working—conold.

TABLE II.

Calendar year.	Rajputana-Malwa, 3' 3½".		Holkar and Sindia-Neemuch, 3' 3½".		Western Rajputana, 3' 3½".		Bewari-Ferozapore, 3' 3½".		Muttra-Hathras, 3' 3½".		Cawnpore-Farakkhabad, 3' 3½".		Muttra-Achnera, 3' 3½".		Cawnpore-Achnera, 3' 3½".		Godhra-Rutlam-Nagda, 5' 6".	
	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.
1873	Rs. 32	96:50	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1874	69	80:37	60	81:02	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1875	98	64:04	123	91:71	...	...	...	...	108	58:18	...	...	...	...	...	...	...	...
1876	114	65:40	99	92:87	...	...	...	...	55	57:74	...	...	...	...	...	...	...	...
1877	130	67:49	80	76:86	...	...	...	...	68	54:86	...	...	...	...	...	...	...	...
1878	136	61:97	122	67:50	...	...	...	...	65	53:33	...	...	...	...	...	...	...	...
1879	153	66:74	128	74:53	86	86:08	...	...	83	54:97	...	...	...	...	...	...	...	...
1880	152	66:88	118	74:74	151	85:79	...	...	89	57:35	18	233:15	...	...	...	...	...	...
1881	189	60:41	132	69:11	...	...	...	...	90	69:19	65	69:76	39	89:01	...	...	...	...
1882	188	53:07	...	...	...	...	...	...	84	76:97	80	67:26	57	86:42	...	...	...	...
1883	219	52:18	...	...	...	...	75	81:28	Included with Cawnpore-Achnera.				...	...	80	63:96	...	...
1884	223	56:92	...	...	...	...	96	67:28	...	...	...	...	...	...	81	69:17	...	...
1885	224	52:81	...	...	...	...	...	...	...	...	...	...	...	...	70	87:87	...	...
1886	212	50:27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1887	191	50:84	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1888	215	48:26	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1889	230	45:82	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1890	200	50:41	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1891	251	43:47	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1892	257	41:01	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1893	259	41:12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	50	41:61
1894	285	38:19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	106	40:64
1895	269	46:29	...	...	...	...	...	...	...	...	...	...	...	...	...	...	184	57:01
1896	227	44:35	...	...	...	...	...	...	...	...	...	...	...	...	...	...	189	68:27
1897	212	46:60	...	...	...	...	...	...	...	...	...	...	...	...	...	...	146	72:02
1898	241	42:83	...	...	...	...	...	...	...	...	...	...	...	...	...	...	181	51:14
1899	295	42:06	...	...	...	...	...	...	...	...	...	...	...	...	...	...	172	58:84
1900	317	43:18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	219	46:84
1901	313	46:29	...	...	...	...	...	...	...	...	...	...	...	...	...	...	156	45:15
1902	291	47:54	...	...	...	...	...	...	...	...	...	...	...	...	...	...	140	46:27
1903	253	49:16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	147	48:29
1904	260	47:63	...	...	...	...	...	...	...	...	...	...	...	...	...	...	158	47:63
1905	206	42:95	...	...	...	...	...	...	...	...	...	...	...	...	...	...	224	42:73
1906	287	47:37	...	...	...	...	...	...	...	...	...	...	...	...	...	...	217	47:04

2(m) Vijapur-Kalol-Kadi railway (3' 3½" gauge)—

Details of construction—

This railway is 41·37 miles long. Its construction was sanctioned in 1899 and it was opened in 1903.

Permanent-way.—16 miles are laid with 41½-lb. flat-footed steel rails and 25 miles with 40-lb. flat-footed iron rails on deodar sleepers.*Ballast.*—The line is ballasted with broken stone and shingle.*Fencing.*—Only station yards and 11·07 miles of the Vijapur-Kalol section are fenced.*Curves.*—The sharpest curve is of 3,820 feet radius.*Gradients.*—The ruling gradient is 1 in 150.

Terms of contracts—

The railway is the property of the Baroda State and is worked under the following:—

Agreement of—23rd November 1903 (between the Government of His Highness the Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company) for working.*Contract of*—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The terms of working are the same as on the Potlad-Cambay railway (Anand-Tanapur section).

Statistics of working—

Calendar year.	TABLE I.				TABLE II.	
	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Pro: of exp: to earnings.
1890	Rs. 7,534	Rs. ...	Rs. ...	...	Rs. ...	...
1900	29,885	...	...	...	...	...
1901	6,60,716	...	...	...	...	...
1902	10,47,188	19,514	9,226	1·18	23	52:72
1903	11,84,246	56,916	28,782	2·43	31	49:43
1904	13,35,402	74,572	40,083	3·00	35	46:25
1905	13,19,586	87,181	50,496	3·83	40	42:05
1906	18,24,925	95,660	50,648	3·82	44	47:05

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 3} _{Sub-heads (a) to (c)} **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.**

2(n) Gaekwar's Dabhoi railway (2' 6" gauge)—**Details of construction—**

The total length of the railway is 94.48 miles. It consists of three sections, Miyagam to Chandod, 30.62 miles; Dabhoi to Bodeli, 22.41 miles; and Dabhoi to Masor Road, 41.45 miles. The construction of those sections was first sanctioned in 1872, 1877 and 1879, respectively, and they were opened throughout in 1879, 1890 and 1904, respectively.

Permanent-way.—The line is laid with 31-lb. flat-footed steel rails on wooden sleepers, but there are still about 5 miles of 28-lb. iron rails in the road.

Ballast.—The line is chiefly ballasted with sand.

Fencing.—The line is practically unfenced except in station yards.

Curves.—The sharpest curve is of 500 feet radius.

Gradients.—The ruling gradient is 1 in 400, with small lengths of 1 in 200 and 1 in 300.

Terms of contracts—

The line is owned by the Baroda State and worked under—

Agreement of—1st January 1897 (between the Government of His Highness the Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company) for working.

The general conditions of the agreement are as follows:—

Government aid.—Nil. The line is the property of the Baroda State.

Currency of agreement.—The agreement may be terminated at any time on one year's notice from either side to expire on the 30th June or 31st December.

Terms of working.—The Company work the railway at actual cost, plus 12½ per cent. of total working expenses (but not less than Rs 500 per mensem or more than Rs. 800 per mensem, in a half-year) for superintendence.

Rates and fares.—The rates and fares are fixed from time to time by the Company with the approval of His Highness' Government, and as far as possible must conform generally with those in force on the Bombay, Baroda and Central India railway.

Statistics of working—

Calendar year.	TABLE I.				TABLE II.			REMARKS.
	Capital outlay to end of each year	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Calendar year.	Earnings per mile per week.	Pro: of exp: to earnings.	
	Rs.	Rs.	Rs.			Rs.		
1879 . . .	9,62,450	72,083	31,608	3.28	1873	21	98.34	
1880 . . .	11,65,510	1,28,825	65,134	5.59	1874	32	75.78	
1881 . . .	12,57,448	1,41,233	48,849	3.88	1875	33	78.11	
1882 . . .	12,73,942	1,44,022	46,717	3.66	1876	38	75.35	
1883 . . .	12,73,630	1,46,970	38,585	3.05	1877	45	78.20	
					1878	43	62.42	
					1879	46	56.15	
1884 . . .	12,80,177	1,49,091	48,560	3.80	1880	51	49.44	
1885 . . .	13,11,229	1,52,283	55,623	4.21	1881	46	65.41	
1886 . . .	13,58,502	1,53,699	39,394	2.90	1882	47	67.54	
1887 . . .	13,16,259	1,56,752	47,339	3.52				
1888 . . .	13,74,295	1,45,757	43,854	3.19	1883	48	73.75	
					1884	49	67.43	
					1885	50	63.47	
					1886	50	74.37	
1889 . . .	16,10,398	1,42,089	49,398	3.07	1887	51	60.73	
1890 . . .	17,53,877	1,95,028	74,570	4.25				
1891 . . .	17,04,157	2,01,165	68,126	3.80	1888	48	60.91	
1892 . . .	18,47,408	2,38,609	1,06,510	5.77	1889	47	65.45	
1893 . . .	18,55,158	2,52,106	1,32,507	7.14	1890	57	61.76	
					1891	54	66.13	
					1892	64	55.86	
1894 . . .	18,88,774	2,40,816	95,429	5.05				
1895 . . .	19,08,737	2,34,473	96,764	5.02	1893	68	47.44	
1896 . . .	20,74,736	2,58,788	1,25,657	6.06	1894	65	60.29	
1897 . . .	21,08,574	2,20,901	50,949	2.42	1895	63	58.73	
1898 . . .	21,18,491	2,10,240	- 26,592	...	1896	69	51.44	
					1897	56	76.94	
1899 . . .	21,17,586	2,45,974	87,571	4.14	1898	51	112.65	
1900 . . .	21,17,528	2,35,281	61,603	2.44	1899	60	64.40	
1901 . . .	21,14,302	2,53,936	73,427	3.47	1900	57	73.82	
1902 . . .	22,34,829	2,22,573	76,867	3.62	1901	62	71.09	
1903 . . .	23,60,528	2,60,550	7,467	0.32	1902	54	65.69	
					1903	60	97.18	The decrease in net earnings in 1903 was due principally to the cost of 3 engines having been charged to Revenue.
1904 . . .	24,64,882	2,98,908	1,26,486	5.18	1904	65	57.70	
1905 . . .	24,72,909	3,72,467	2,04,004	8.25	1905	76	45.23	
1906 . . .	24,75,537	3,94,817	1,78,665	7.23	1906	80	54.75	

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 2 **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.**
Sub-heads (a) to (c)**2 (c) Rajpipla railway (2' 6" gauge)—****Details of construction—**

This line, which connects Anklesvar with Nanded, is 37·37 miles long. Its construction was sanctioned in 1894 and it was opened in 1899.

Permanent-way.—The line is laid with 41 lb. flat-footed steel rails on half-round jungle teak sleepers.

Ballast.—The line is chiefly ballasted with coarse river sand.

Fencing.—Only the station yards and small lengths at miles 4 and 9 are fenced.

Curves.—The sharpest curve is of 1,132 feet radius.

Gradients.—The ruling gradient is 1 in 150.

Terms of contracts—

The line is owned by the Rajpipla State and is worked under—

Agreement of—19th March 1900 between the Rajpipla State and the Bombay, Baroda and Central India Railway Company.

The general conditions of the agreement are as follows:—

Government aid.—Nil. The line is the property of the Rajpipla State.

Currency of agreement.—The agreement may be terminated by either party on the expiration of three years or at the end of any calendar half-year thereafter, on one year's notice from either side.

Terms of working.—The Rajpipla State is debited with the actual cost of working; and in addition one per cent. on the net earnings of the Rajpipla railway as contribution to the Provident Fund and 12½ per cent. on total working expenses (but not less than Rs. 300 per mensem or more than Rs. 800 per mensem) for superintendence.

Rates and fares.—To be fixed from time to time by the Company with the approval of the Rajpipla State; and to conform with those generally in force on the Bombay, Baroda and Central India railway.

Statistics of working—

Calendar year.	TABLE I.				TABLE II.	
	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Pro. of exp. to earnings.
	Rs.	Rs.	Rs.		Rs.	
1894	12,674	...	...	...	...	...
1895	77,265	...	...	...	...	...
1896	4,09,141	...	...	...	...	...
1897	7,55,792	5,705	6,574	...	11	214·53
1898	11,03,333	10,624	9,172	...	11	186·33
1899	13,07,820	35,809	8,478	0·65	22	76·32
1900	13,40,159	42,463	12,139	0·93	25	75·46
1901	12,06,822	47,182	10,487	0·80	24	77·77
1902	13,05,415	38,726	10,131	0·73	20	73·84
1903	13,04,281	44,870	10,674	0·82	23	76·19
1904	13,04,522	49,207	16,890	1·29	25	65·68
1905	13,04,522	62,017	28,194	2·16	32	54·54
1906	13,04,867	67,137	32,526	2·49	35	51·37

Number Main head 3 **EASTERN BENGAL (STATE) RAILWAY SYSTEM—**
Sub-heads (a) to (d)

Lines comprising the system.—The Eastern Bengal (State) railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(a) Eastern Bengal (State) railway, Eastern, Southern and Central sections (5' 6" gauge)	497·95	8·39	506·34
(b) Eastern Bengal (State) railway, Northern, Fehar, Dacca and Kannia-Dhubri sections and Gauhati extension (3' 3½" gauge)	718·31	228·27	946·58
(c) branches and British section of the Santalari Extension (2' 6" gauge)	55·03	...	55·03
(d) Mymensingh-Jamalpur-Jagannathganj railway (3' 3½" gauge)	53·23	...	53·23
(d) Cooch Behar railway (2' 6" gauge)	33·60	...	33·60
Total	1,358·11	236·66	1,594·77

Running powers—

Foreign line over home line:—

East Indian railway	{ Nailhati to Brace Bridge Junction Canal Junction to Chitpore }	{ for goods trains only }	{ 32·75 1·75 34·50 }
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3 (a) Eastern Bengal (State) railway, Eastern, Southern and Central sections (5' 6" gauge)—**Details of construction—**

The open mileage of the standard gauge portion of this system amounts to 497·95 miles, which may be divided into (1) *Eastern section*, main line, 145·07 miles, branches, 154·37 miles; (2) *Southern section*, main line, 29·20 miles, branches, 41·62 miles; (3) *Central section*, main line, 104·51 miles, branches, 23·18 miles. Of these 112·21 miles are double line. Besides the above there were under construction 3·39 miles of single, and 5·00 miles of double line; and 2·99 miles of double line are being quadrupled.

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 112.]

Number ^{Main head 3} ^{Sub-heads (a) to (d)} **EASTERN BENGAL (STATE) RAILWAY SYSTEM—*contd.***

3 (a) Eastern Bengal (State) railway, Eastern, Southern and Central sections (5' 6" gauge)—*concl'd.*

Details of construction—*concl'd.*

Sanction was first given to the construction of the above mentioned sections of the Eastern Bengal (State) railway in 1859, 1862 and 1881, respectively, and they were opened throughout in 1871, 1863 and 1884.

Permanent-way.—The permanent-way on the double line portion of the Eastern section consists of 73-lb. and 75-lb. double-headed steel rails, with Denham-Olpherts' cast iron sleepers, except on the length between Calcutta and Naihati which is laid with 85-lb. bull-headed steel rails, with sal and jarrah sleepers at the joints. The single line portion of the Eastern section is also laid chiefly with 73-lb. and 75-lb. double-headed steel rails, the greater part on Denham and Olpherts' cast iron sleepers and the remainder on cast iron bowl and sal wood sleepers. The Murshidabad branch is laid with 75-lb. new pattern flat-footed steel rails on sal sleepers.

The double line portion of the Southern section and the Budge Budge branch are laid with 73-lb. double-headed steel rails on Denham and Olpherts' cast iron sleepers. The single line portion of the Southern section consists of 72-lb. and 73-lb. double-headed iron and steel rails mostly on Denham and Olpherts' cast iron sleepers. The Diamond Harbour branch is laid with 64-lb. and 73-lb. double-headed steel rails mostly on Denham and Olpherts' cast iron sleepers.

The Central section is laid with flat-footed steel rails 62 lbs. to the yard on sal sleepers.

Ballast.—The main line is ballasted generally with brick ballast. Where 85-lb. bull-headed rails have been laid, brick ballast has been replaced by stone.

Fencing.—The whole of the Eastern section is fenced, except between Panchooria Junction and Goalundo, and the Faridpur branch. The Southern section is fenced as far as Sonarpur; beyond Sonarpur to Canning there is no fencing. The Diamond Harbour and Budge-Budge branches are fenced. The Central section is fenced throughout.

Curves.—The sharpest curve is of 1,000 feet radius.

Gradients.—The ruling gradient is 1 in 300.

Terms of contracts.—*Nil.* The line is owned and worked by the State.

Statistics of working.—See pages 131 and 132.

3 (b) Eastern Bengal (State) railway, Northern, Behar, Dacca and Kaunia-Dhubri sections and Gauhati extension (3' 3½" gauge)—

Details of construction—

The metre gauge section comprises an open mileage of 718.31 miles and may be divided into (1) *Northern section*, main line, 196.85 miles, branches, 161.49 miles; (2) *Behar section*, main line, 81.86 miles, branches, 102.42 miles; (3) *Dacca section*, 85.92 miles; (4) *Kaunia-Dhubri section*, 51.02 miles and (5) *Gauhati extension*, 35.75 miles.

In addition to the above 228.27 miles are under construction.

Sanction was first given to the construction of (1), (2), (3) and (4) of the above-mentioned sections in 1874, 1881, 1882 and 1899, respectively, and they were opened through in 1878, 1889, 1885 and 1902. (5) was sanctioned in 1902 and opened up to mile 45.37 only in 1906.

Permanent-way.—The permanent-way consists of flat-footed steel rails, weighing 50 lbs. and 41½ lbs. per yard, on sal sleepers. On the Northern section, Sara to Siliguri, and the Brahmaputra-Sultanpur and Kaunia-Bonarpara branches and on the Gauhati extension the rails are 50-lb.. On the Behar and Kaunia-Dhubri sections, Manihari Ghat to Dhubri, the greater part of the rails are 50-lb., and the remainder are 41½-lb. On the Kosi branch and the Dacca section the rails are all 41½-lb. On the Barsoi-Kissengunge branch the rails are mostly flat-footed iron, 40 lbs. per yard, the remainder being 41½-lb. steel. The sleepers are mostly sal, but there are also metal sleepers of various types.

Ballast.—The whole of the line, except the portion from Golokganj Junction to Dhubri, the Kaunia-Bonarpara branch and the Gauhati extension, is ballasted or shortly to be ballasted. The ballast is brick, stone and shingle.

Fencing.—The whole of the 3' 3½" gauge lines are fenced, except the Brahmaputra-Sultanpur, Barsoi-Kissengunge and Kaunia-Bonarpara branches, the Gauhati extension and the portions from Golokganj Junction to Dhubri and Dacca to Mymensingh.

Curves.—The sharpest curve is of 1,416 feet radius.

Gradients.—The ruling gradient is 1 in 200.

Terms of contracts.—*Nil.* The line is owned and worked by the State.

Statistics of working.—See pages 131 and 132.

3 (c) Eastern Bengal (State) railway, Ranaghat-Krishnagar and Teesta-Kurigram branches, and the British section of the Santrabari extension (2' 6" gauge)—

The Ranaghat-Krishnagar branch has been amalgamated with the Eastern Bengal (State) railway system from 1st July 1904. The Teesta-Kurigram branch was originally a portion of the 2' 6" gauge lines from Teesta Junction to Mogalhat and Jatrapur, known as the Kaunia-Dharila branch. The line from Teesta Junction to Mogalhat has been converted to the 3' 3½" gauge to form an integral part of the "Kaunia-Dhubri section." The line from Kurigram to Jatrapur has been abandoned.

Details of construction—

The Ranaghat-Krishnagar branch is 20.25 miles long. Its construction was sanctioned in 1895 and it was opened in 1899.

The Teesta-Kurigram branch is 14.99 miles long; it was opened in 1881.

The British section of the Santrabari extension of the Cooch Behar State railway is 19.79 miles long. Its construction was sanctioned in 1897 and it was opened in 1901.

Permanent-way.—On the Ranaghat-Krishnagar and Teesta-Kurigram branches the rails are flat-footed steel, 25-lbs. per yard; the sleepers are pyinkado and sal. On the Santrabari extension the rails are flat-footed iron, 40-lbs. per yard, and flat-footed steel, 41½-lbs. per yard, laid on sal sleepers.

Ballast.—The Ranaghat-Krishnagar branch is brick ballasted; the Teesta-Kurigram branch is not ballasted; and the Santrabari extension is now being ballasted with stone.

Fencing.—No lines on the 2' 6" gauge are fenced.

Curves.—The sharpest curve is of 500 feet radius.

Gradients.—No grade on the Ranaghat-Krishnagar and Teesta-Kurigram branches exceeds 1 in 200. On the Santrabari extension the ruling gradient is 1 in 100, and there is a short grade of 1 in 50 near the terminus (Jainti).

Terms of contracts.—*Nil.* The line is owned and worked by the State.

Statistics of working.—See pages 131 and 132.

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 3} Sub-heads (a) to (d). **EASTERN BENGAL (STATE) RAILWAY SYSTEM—contd.****3 (a) and (b) Eastern Bengal (State) railway (5' 6", 3' 3½" and 2' 6" gauge sections)—contd.**

Statistics of working—

TABLE I.

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Interest.	Annuity.	Company's share of surplus profits.	Gain or loss to the State.	REMARKS.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1879	6,23,44,476	60,22,272	25,79,314	4.11	28,51,165	...	3,67,326	-6,39,177	
1880	6,33,72,334	66,91,060	33,75,186	5.33	29,27,692	...	5,34,050	-87,456	
1881	6,38,51,905	75,05,736	42,46,106	6.70	28,50,922	...	8,24,125	+6,11,359	
1882	6,50,12,846	85,79,404	47,17,459	7.26	27,92,607	...	8,95,229	+16,29,523	
1883	7,01,85,023	80,73,165	47,10,716	6.70	29,48,783	...	4,98,323	+12,63,710	
1884	6,58,68,000	78,12,979	24,80,526	3.77	15,92,186	3,50,920	...	+5,37,120	
1885	7,31,60,273	72,85,916	25,25,336	3.45	21,82,794	7,22,920	...	-3,80,373	
1886	8,00,56,752	82,73,918	30,89,720	3.86	24,34,239	19,04,750	...	-12,49,269	
1887	8,11,53,166	94,30,399	45,04,783	5.55	41,71,008	14,30,152	...	-11,56,378	
1888	8,59,09,629	1,03,19,210	55,25,424	6.44	28,84,744	20,11,011	...	+6,30,669	
1889	8,79,71,519	1,11,76,674	61,91,625	7.04	30,15,703	26,43,953	...	+11,28,969	
1890	10,00,68,626	1,14,78,382	60,70,323	6.07	30,96,150	18,14,110	...	+11,60,063	
1891	10,31,46,023	1,26,75,440	65,92,100	6.33	33,97,713	17,51,621	...	+13,82,736	
1892	10,60,47,429	1,15,56,446	62,33,727	5.89	38,86,181	16,59,922	...	+6,93,624	
1893	10,68,29,000	1,20,51,117	60,35,138	6.21	39,53,310	16,49,185	...	+10,32,643	
1894	10,78,52,685	1,40,15,726	83,63,559	7.78	41,01,624	18,91,850	...	+23,60,045	
1895	10,71,92,132	1,15,09,739	89,74,474	8.37	41,50,115	18,72,565	...	+29,51,494	
1896	10,97,80,613	1,50,81,670	90,02,286	8.20	41,06,132	17,56,150	...	+31,40,004	
1897	11,47,69,205	1,47,62,233	80,60,612	7.02	42,80,503	16,33,278	...	+21,26,831	
1898	11,78,51,619	1,75,17,879	83,35,081	7.07	43,89,356	15,75,020	...	+23,70,688	
1899	12,16,19,777	1,56,12,476	83,91,083	6.82	45,00,276	15,72,391	...	+22,38,116	
1900	12,58,52,617	1,71,00,160	92,46,424	7.35	47,02,516	15,66,769	...	+29,77,139	
1901	13,19,95,226	1,65,99,140	83,08,281	6.29	41,11,665	23,37,123	...	+18,59,493	
1902	13,99,82,381	1,78,93,098	91,48,310	6.54	41,25,883	23,29,895	...	+23,91,562	
1903	14,91,79,763	1,81,52,129	88,57,694	5.94	47,10,867	23,33,377	...	+18,12,850	
1904	15,89,84,515	1,94,63,098	88,23,872	5.55	50,38,905	23,33,925	33,597	+14,16,915	
1905	19,04,12,932	2,03,73,194	96,19,004	5.05	56,28,338	23,33,730	...	+16,57,836	
1906	20,23,66,593	2,16,31,081	1,00,08,661	5.24	63,28,666	23,33,925	...	+19,46,070	

*Represents payment made to the Brahmaputra-Sultanpur Branch-Railway Company up to 1st April 1904, on account of surplus profits and other adjustments.

TABLE II.

Calendar year.	3 (a)				3 (b)				Northern, Behar and Kannia-Dharila sections and Gauhati extension, including the Ranghat Krishnaagar and Teesta-Kurigram branches and the British section of the Santalabari extension (3' 3½" and 2' 6" gauges)			
	Eastern, Southern and Central sections (5' 6" gauge).		Calcutta and South-Eastern section (5' 6" gauge).		Northern Bengal (State) (3' 3½" gauge).		Kannia-Dharila (2' 6" gauge).		Dacca section (3' 3½" gauge).		Earnings per mile	Pro. of exp. to earnings.
	Earnings per mile per week.	Pro. of exp. to earnings.	Earnings per mile per week.	Pro. of exp. to earnings.	Earnings per mile per week.	Pro. of exp. to earnings.	Earnings per mile per week.	Pro. of exp. to earnings.	Earnings per mile per week.	Pro. of exp. to earnings.		
	Rs.		Rs.		Rs.		Rs.		Rs.		Rs.	
1862	94	55.59	36	128.39	...	...	...	...	...	...	...	...
1863	119	48.43	58	131.07	...	...	...	...	...	...	...	...
1864	176	51.67	53	137.03	...	...	...	...	...	...	...	...
1865	233	48.98	75	114.32	...	...	...	...	...	...	...	...
1866	243	51.05	79	118.59	...	...	...	...	...	...	...	...
1867	279	48.71	64	133.60	...	...	...	...	...	...	...	...
1868	308	46.33	60	173.12	...	...	...	...	...	...	...	...
1869	313	50.29	55	145.54	...	...	...	...	...	...	...	...
1870	335	55.69	55	104.88	...	...	...	...	...	...	...	...
1871	270	56.01	40	90.82	...	...	...	...	...	...	...	...
1872	314	66.60	40	92.07	...	...	...	...	...	...	...	...
1873	377	49.08	70	102.56	...	...	...	...	...	...	...	...
1874	483	52.18	68	78.35	...	...	...	...	...	...	...	...
1875	356	62.16	71	80.48	...	...	...	...	...	...	...	...
1876	401	43.66	68	108.62	...	...	...	...	...	...	...	...
1877	529	41.07	81	81.74	20	140.29	...	...	...	...	...	...
1878	512	43.71	86	75.08	81	75.31	...	...	...	...	...	...
1879	491	45.97	92	66.44	101	99.96	...	...	...	...	...	...
1880	540	41.81	98	71.23	114	60.10	...	...	...	...	...	...
1881	621	40.91	104	66.43	137	51.23	...	...	...	...	...	...
1882	611	40.60	130	97.42	160	49.04	25	92.97	...	...	...	...
1883	466	50.14	109	51.97	169	49.20	33	81.49	...	...	...	...
1884	422	54.06	...	...	156	69.93	39	78.26	...	...	...	...
1885	380	61.25	Included with Eastern and Southern sections.	...	153	70.16	31	107.29	...	...	47	141.12
1886	403	61.97	...	...	189	52.85	29	122.87	...	...	56	111.47
1887	268	52.23	...	...	...	...	...	...	...	...	...	...
1888	546	47.47	...	...	Included with Eastern and Southern sections.	...	...	...	Included with Eastern and Southern sections.	...	...	...
1889	563	44.60	...	...	...	...	...	...	...	...	...	...
1890	521	47.12	...	...	...	...	...	...	...	...	...	...
1891	562	48.01	...	...	...	...	...	...	181	55.48	93	62.10
1892	562	44.32	...	...	...	...	...	...	165	47.32	85	64.40
1893	529	43.71	...	...	...	...	...	...	182	45.17	96	62.41
1894	621	40.33	...	...	...	...	...	...	191	39.14	112	54.46
1895	640	35.97	...	...	...	...	...	...	199	40.20	120	51.49
1896	676	39.74	...	...	...	...	...	...	212	40.04	115	53.27
1897	678	46.48	...	...	...	...	...	...	195	42.41	114	55.92
1898	652	41.88	...	...	...	...	...	...	201	41.88	129	51.68
1899	640	43.30	...	...	...	...	...	...	218	42.21	131	55.78
1900	689	47.75	...	...	...	...	...	...	245	42.14	146	58.83
1901	678	50.89	...	...	...	...	...	...	225	46.91	137	65.12
1902	728	48.18	...	...	...	...	...	...	235	48.65	146	62.12
1903	707	50.27	...	...	...	...	...	...	239	50.14	144	78.25
1904	751	53.14	...	...	...	...	...	...	233	55.09	145	67.62
1905	613	54.61	...	...	...	...	...	...	241	44.77	155	67.28
1906	545	58.91	...	...	...	...	...	...	243	54.06	190	58.74

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 3 Sub-heads (a) to (d) **EASTERN BENGAL (STATE) RAILWAY SYSTEM—contd.****3 (a) and (b) Eastern Bengal (State) railway (5' 6", 3' 3½" and 2' 6" gauge sections)—concl'd.**

Statistics of working—concl'd.

The tables below show the statistics of working of the Central section, the Brahmaputra-Sultanpur and Ranaghat-Krishnagar branches before they were purchased by the State.

Central section (late Bengal Central railway) (5' 6" gauge).

Calendar year.	TABLE I.							TABLE II.	
	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Interest.	Company's share of net earnings.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
881	10,51,983	...	...	...	51,616	...	—51,616	...	...
882	46,18,355	...	...	...	1,85,534	...	—1,85,534	...	...
883	79,36,235	1,07,954	—39,300	...	3,17,449	...	—3,56,839	64	136.50
884	90,54,719	4,54,867	—1,19,682	...	3,62,189	...	—4,81,871	76	126.31
885	99,04,061	5,35,553	8,233	0.09	3,60,162	...	—3,51,929	82	98.46
886	89,68,705	5,67,343	—12,528	...	3,75,210	...	—4,17,758	87	102.70
887	91,00,422	6,18,194	—7,928	...	4,60,840	...	—1,68,468	100	101.23
888	92,53,170	7,12,901	1,58,145	1.71	5,19,942	...	—3,61,797	110	77.82
889	94,46,671	7,37,191	2,95,967	3.13	5,18,693	...	—2,22,705	113	59.85
890	96,88,212	6,97,594	2,15,907	2.54	4,39,962	58,992	—2,53,047	103	63.18
891	99,41,845	8,11,633	3,27,735	3.30	4,72,482	73,429	—2,18,175	125	59.63
892	1,00,66,784	7,89,947	3,12,933	3.11	5,30,251	71,600	—2,91,918	118	59.33
893	1,00,88,983	7,83,529	3,14,092	3.12	5,57,007	79,647	—3,01,662	121	59.80
894	1,01,11,094	8,29,119	3,41,182	2.37	6,11,115	...	—3,70,243	126	60.92
895	1,01,77,466	9,47,391	3,98,869	3.92	6,08,944	85,023	—2,95,158	146	57.90
896	1,06,38,927	9,33,265	3,44,165	3.20	5,69,175	91,306	—3,16,016	144	62.85
897	1,17,36,510	11,38,799	5,16,922	4.40	5,36,809	95,271	—1,15,158	175	56.98
898	1,23,18,300	10,21,657	3,68,008	2.98	5,19,231	1,20,642	—2,71,865	158	64.08
899	1,26,78,729	11,39,359	4,11,813	3.48	5,07,045	97,581	—1,62,803	158	61.23
900	1,26,96,115	11,35,119	5,50,639	4.34	5,04,985	1,21,611	—78,897	185	58.70
901	1,29,74,075	14,05,413	6,42,940	4.96	5,08,291	1,46,144	—11,495	194	54.25
902	1,31,11,415	13,17,214	5,73,918	4.38	5,11,298	1,53,667	—91,047	182	56.43
903	1,31,88,948	15,08,966	5,07,425	3.85	5,15,051	1,21,830	—1,29,456	209	66.36
904	1,31,30,812	15,59,698	5,39,679	4.10	5,15,679	1,30,367	—1,06,367	216	65.40
905 { 1st half	1,31,77,927	6,66,363	1,58,575	1.90	4,475	38,525	1,15,575	181	76.20
905 { 2nd half									

Amalgamated with the Eastern Bengal (State) railway.

Brahmaputra-Sultanpur (3' 3½" gauge) branch.

Calendar year.	TABLE I.							TABLE II.		REMARKS.
	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Interest.	Company's share of net earnings.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.	
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.		
1897	2,02,919	...	...	...	...	...	...	...	...	Not earnings during 1899 and 1900 were paid over to the Company and interests up to 1900 were charged to capital.
1898	12,55,157	...	...	...	...	...	...	...	...
1899	19,58,137	36,300	...	...	...	...	...	38	45.00	
1900	24,20,811	1,30,587	...	...	...	...	...	58	45.00	
1901	28,27,619	1,96,848	61,375	2.17	42,411	...	+18,961	64	45.00	
1902	29,17,991	2,10,124	1,32,233	4.53	86,750	9,480	+36,003	78	45.00	
1903	29,42,486	2,74,379	1,89,008	4.75	88,185	22,742	+28,981	82	45.00	
1904	...	...	...	...	...	...	...	...	...

Ranaghat-Krishnagar (2' 6" gauge) branch.

Calendar year.	TABLE I.							TABLE II.	
	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Subsidy from District Board.	Total income.	Per cent. of total income on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1898	7,22,369	...	...	...	...	...	...	...	...
1899	7,27,809	46,343	8,415	1.16	12,352	20,767	2.85	59	81.84
1900	7,51,809	69,302	19,442	2.59	9,472	28,914	3.85	66	71.95
1901	7,51,157	69,117	15,185	2.02	1,465	16,650	2.22	68	78.08
1902	7,51,158	76,180	21,953	2.84	15,960	37,313	4.97	72	71.97
1903	7,48,657	86,494	39,832	4.55	5,674	39,506	5.31	92	60.86
1904 { 1st half	...	40,861	12,160	...	2,876	15,036	...	...	...
1904 { 2nd half	...	...	...	...	...	...	...	...	...

Amalgamated with the Eastern Bengal (State) railway.

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 3}_{Sub-heads (a) to (d)}. **EASTERN BENGAL (STATE) RAILWAY SYSTEM—contd.****3 (c) Mymensingh-Jamalpur-Jagannathganj Branch railway (3' 3½" gauge)—**

This line, which terminates on the Brahmaputra river, is connected with the Eastern section of the Eastern Bengal (State) railway at Goalundo by the India General Steam and River Steam Navigation Companies' steamer services.

Details of construction—

This railway is 53·22 miles long. Its construction was sanctioned in 1893 and it was opened in 1899.

Permanent-way.—The permanent-way consists of flat-footed steel rails, 50 lbs. to the yard, laid on sāl sleepers

Ballast.—The line is ballasted throughout with brick.

Fencing.—The line is fenced only at stations and through the town of Mymensingh.

Curves.—The sharpest curve is of 2,564 feet radius.

Gradients.—The ruling gradient is 1 in 300.

Terms of contracts—

The Mymensingh-Jamalpur-Jagannathganj branch railway is worked under the following contracts:—

Contracts of—6th January 1897 (between the Secretary of State and the India General Steam Navigation Company) for the construction and working of the Mymensingh-Jamalpur-Jagannathganj branch railway.

3rd October 1899 (between the India General Steam Navigation Company, the India General Navigation and Railway Company and the Secretary of State) for the transfer of the domicile of the Mymensingh-Jamalpur-Jagannathganj branch railway office from Calcutta to London.

The general conditions of the contracts are as follows:—

Government aid.—Government in respect of each year allow to the Mymensingh-Jamalpur-Jagannathganj Branch Railway Company, by way of rebate on the share attributable to the Eastern Bengal (State) railway of the receipts from traffic interchanged between the two railways, such a sum not exceeding in any year the net earnings from traffic except railway stores interchanged between the Eastern Bengal (State) railway system and this railway, as will, together with the net earnings of the Company for the year, make up an amount equal to interest for the year at a rate of 3½ per cent. per annum on the actual capital expenditure. Land has been provided free of charge.

Currency of contracts.—Government may determine the contracts on 12 months' notice either on the 31st December 1919, or at the end of any subsequent period of 10 years or on the 31st December 1948, the Government paying, if contracts are determined on the 31st December 1919, or at the expiration of any subsequent period of 10 years, a sum equal to 25 times the average yearly net earnings, not including rebate payments, during the three years prior to determination, but not exceeding by more than 20 per cent., or not being less than, the total capital expenditure; and if determined on the 31st December 1948 (50 years), the total amount of such capital expenditure.

Power of Company to surrender contracts.—Nil.

Terms of working.—After deduction of 45 per cent. of the gross earnings for working expenses (which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year), in which is included all such legal expenses of the Company as are properly debitable to revenue, the balance is payable to the Company.

Rates and fares.—To be arranged between Government and the working agency within the maxima and minima rates in force on the Eastern Bengal (State) railway.

Statistics of working—

TABLE I.								TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Rebate from E. B. S. Ry.	Total income.	Percentage on capital outlay.	Earnings per mile per week.	Pro. of exp. to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1896	1,950	...	...	...	...	...	...	...	...
1897	5,54,688	...	...	...	...	...	...	...	...
1898	10,44,638	7,660	4,213	0·40	...	4,313	0·40	27	45·00
1899	16,11,348	66,490	36,575	2·27	...	36,575	2·27	35	45·00
1900	18,78,395	1,62,028	89,116	4·74	...	89,116	4·74	58	45·00
1901	20,84,846	1,67,756	92,265	4·43	...	92,265	4·43	60	45·00
1902	22,55,677	2,05,251	1,12,888	4·91	...	1,12,888	4·91	74	45·00
1903	23,28,917	2,22,825	1,24,993	5·37	...	1,24,993	5·37	82	48·90
1904	23,51,113	2,21,168	1,24,312	5·29	...	1,24,312	5·29	81	43·79
1905	23,36,029	2,16,642	1,18,748	4·98	...	1,18,748	4·98	81	45·19
1906	24,15,248	2,72,929	1,50,030	6·21	...	1,50,030	6·21	103	45·03

3 (d) Cooch Behar railway (2' 6" gauge)—**Details of construction—**

This railway is 33·60 miles long, consisting of main line, 22·15 miles, and branch, 11·45 miles known as the Native State section of the Cooch Behar-Santrabari extension. Its construction was sanctioned in 1891 and it was opened throughout in 1900.

Permanent-way.—The line is laid for 19·55 miles with 25-lb. and for 1·63 miles with 41½-lb. steel rails on sāl and pyinkado sleepers, and for 12·22 miles with 40-lb. iron rails on sāl sleepers. All rails are flat-footed.

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 3 Sub-heads (a) to (d). **EASTERN BENGAL (STATE) RAILWAY SYSTEM—concl'd.**

3 (d) Cooch Behar railway (2' 6" gauge)—concl'd.

Details of construction—concl'd.

Ballast.—The line is laid without ballast.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 2,000 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Terms of contract—

The Cooch Behar railway is worked under the following agreement:—

* **Agreement**—of 15th June 1903, having effect from the 1st January 1901, (between the Secretary of State and His Highness the Maharaja of Cooch Behar) for working.

The general conditions of the agreement are as follows:—

Government aid.—The line is the property of the Cooch Behar State.

Currency of agreement.—The Eastern Bengal (State) railway to maintain and work the Cooch Behar State railway for a period of five years from 1st January 1901.

Terms of working.—The Eastern Bengal (State) railway to receive 40 per cent. of the gross earnings for maintenance and working; provided that when the stock of the Eastern Bengal (State) railway is used for the conveyance of any traffic on the Cooch Behar railway, the Eastern Bengal (State) railway will receive and retain up to, but not exceeding, 45 per cent. of the gross earnings obtained from the use of such stock. The percentage of working charges will cover the cost of 'New Minor Works' up to the limit of Rs. 30 per mile per annum.

Rates and fares.—The Eastern Bengal (State) railway administration have full control over rates and fares.

* [NOTE.—The revision of this agreement is under consideration.]

Statistics of working—

TABLE I.					TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	
1891	11,085	...	...	...	...	...
1892	4,69,136	...	...	...	...	...
1893	6,65,172	5,816	—2,456	...	13	188.94
1894	7,11,318	40,280	8,376	1.20	35	78.71
1895	7,30,353	53,174	19,200	2.63	46	63.89
1896	7,66,734	70,128	38,570	5.03	61	45.00
1897	9,01,319	64,362	35,344	3.92	51	45.00
1898	10,32,938	66,124	6,687	0.65	57	45.00
1899	12,99,031	82,773	43,073	3.32	53	47.95
1900	12,83,936	91,792	51,602	4.02	50	43.41
1901	13,94,923	1,27,496	71,667	5.35	72	41.48
1902	13,95,716	1,24,741	74,452	5.33	71	40.31
1903	14,91,329	1,42,510	84,834	5.62	82	41.19
1904	14,71,331	1,47,575	86,996	5.91	84	41.05
1905	14,82,893	1,48,488	87,313	5.88	85	41.20
1906	14,87,786	1,68,754	77,515	5.23	97	53.89

Number Main head 4 Sub-heads (a) to (d). **EAST INDIAN RAILWAY SYSTEM—**

Chairman.—Bazett Wetenhall Colvin, Esq.

Secretary.—Charles W. Young, Esq.

Offices.—Nicholas Lane, London, E. C.

Lines comprising the system.—The East Indian railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(a) East Indian railway (5' 6" gauge)	2,165.04	258.72	2,423.76
(b) Delhi-Umballa-Kalka railway (5' 6" gauge)	162.36	...	162.36
(c) South Behar railway (5' 6" gauge)	78.76	...	78.76
(d) Tarkessur railway (5' 6" gauge)	22.23	...	22.23
Total	2,428.39	258.72	2,687.11

Running powers—

Home line over Foreign lines:—

Agra East Bank to Agra Fort, Rajputana-Malwa railway	} for goods trains only	Miles.	1.00
Naihati to Bruce Bridge Junction and Chitpore, Eastern Bengal (State) railway			34.50
Moghal Sarai to Benares Cantonment, Oudh and Rohilkhand (State) railway, for passenger trains only			10.00
Total			45.50

Foreign lines over Home line:—

Bengal-Nagpur railway at Katni	} for passenger and goods trains	Miles.	0.30
" " " at Asansol			0.50
" " " at Howrah			1.00
Great Indian Peninsula railway, Agra to Tandla	} for passenger trains only	Miles.	12.75
" " " at Cawnpore			0.27
" " " at Manikpur			0.52
" " " at Katni	} for passenger and goods trains	Miles.	0.63
North-Western and Oudh and Rohilkhand (State) railways, Ghaziabad to Delhi			0.38
Total			30.05

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 4} ^{Sub-heads (a) to (d).} **EAST INDIAN RAILWAY SYSTEM—contd.****4 (a) East Indian railway proper (5' 6" gauge)—****Details of construction—**

The open mileage of the East Indian railway proper is 2,165·04 miles. This may be divided into (1) main line (Howrah to Delhi), 955·08 miles; (2) Grand Chord line (Sitarampur to Moghal Sarai), 281 miles; (3) Loop line (Khana junction to Kiul), 250·39 miles; and (4) branches, 678·57 miles. Of the above 518·27 miles are double and 2·20 miles triple line.

There were in addition 258·72 miles of single line sanctioned for construction, of which 143·32 miles are actually under construction. 13·60 miles of existing single line are also in course of being doubled. The first sanction to constructing the main line was given in 1851 and it was opened throughout in 1871. The Loop line was opened in 1862 and the Grand Chord in 1906.

Permanent-way.—The main line from Howrah to Delhi, including the Grand Chord, the Loop line from Khana junction to Kiul, the Jubbulpore branch, Jharia branch, Ondal loop, Ikrah branch, Giridih branch, Patna-Gya branch, Baran-Daltonganj branch, Agra branch and Shikohabad-Farukhabad branch are laid with steel rails throughout. A few short branches are still laid with iron rails, but these are being replaced with second-hand steel rails removed from the main line in the course of relaying operations.

On both up and down roads of the main line from Howrah to Mokameh, a distance of 284 miles, the rails are 85-lb. bull-headed, with the exception of a few short lengths which still remain to be relaid. 85-lb. bull-headed rails have also been laid on the single line between Moghal Sarai and Khaga, a distance of 147 miles, and Sitarampur to Paharpur, a distance of 134 miles. The rest of the main line and branches are laid with double-headed rails weighing 75 lbs. per yard.

As at present laid, about thirty per cent. of the sleepers are wood and the remainder are iron. The wooden sleepers principally consist of sal and deodar; but of late Jharrah and Australian hard wood sleepers have also been put into the road. The chairs are cast iron and vary in weight from 36 to 51½ lbs. The iron sleepers are of the Denham Olpherts' pattern and weigh about 252 lbs. each.

Ballast.—The line is ballasted throughout with stone.

Fencing.—The line is fenced throughout, except on the Damuda, Ikrah, Salanpur, Chanch, Pandra, Azimganj, Baran-Daltonganj and Shikohabad-Farukhabad branches, the Ondal loop and the Ondal-Sainthia and Dhanbaid-Jharia chords. The Grand Chord is being fenced.

Curves.—The sharpest curve is of 1,525 feet radius.

Gradients.—The ruling gradient of the main line is 1 in 300, except between Rancegunge and Luckeeserai where it is 1 in 200 with a 1 in 100 banking section, between Simultala and Jhijha, and on the Grand Chord the ruling gradient is 1 in 200 (compensated on curves), with a 1 in 80 banking section between Gurpa and Gujhandi. The ruling gradient of the Loop line, the Ondal-Sainthia Chord and the Jubbulpore branch is 1 in 200.

Terms of contracts—

The railway is worked under the following contracts:—

*Contracts of—*22nd December 1879.—East Indian Railway Company's principal contract.

10th November 1893.—Contract for the incorporation of the following State branches in the undertaking:—Ghazipur (Dildarnagar to Tarighat); Bhadreswar (Bhadreswar junction to the right bank of the Hooghly); Mokameh (Mokameh junction to the Ganges); Digba Ghat (Bankipore junction to the right bank of the Ganges at Digba Ghat); Jbaria (Barakar to the Jharia coal-fields); Toposi colliery (Toposi to Khairabad, Nundi to Panuria and Salanpur to Shamdi); Gya (Bankipore to Gya); and Azimganj (Nalhati to Azimganj).

26th February 1896.—As to debenture capital

22nd November 1897.—Contract for the construction and working of the Moghal Sarai-Gya railway.

14th November 1899.—Contract modifying that of 1879.

The general conditions of the contracts are as follows:—

Government aid.—Government guarantee interest at 4 per cent. in sterling on £6,550,000 (being capital representing the deferred portion, i.e., one-fifth of the annuity payable under the terms of purchase). All capital is provided either by Government or by the Company by the issue of debentures or debenture stock, in such manner or on such terms as to interest or otherwise as the Secretary of State determines.

Terms of contracts.—The lines were purchased from the East Indian Guaranteed Railway Company by the State on the 1st January 1880, and all the contracts then subsisting between the Secretary of State and that Company (except those relating to debentures or debenture stock) were determined. The purchase

Company's stock at date of purchase	£ 26,200,000
Premium of 25 per cent. ...	6,550,000
	<hr/> 32,750,000

price was £32,750,000,* and it was provided by the Purchase Act that this should be paid in the form of a terminable annuity of the amount of £1,473,750, payable from the 1st January 1880 to the 14th February 1953. One-fifth of the annuity was deferred, and the holders of this portion (representing a capital

sum of £6,550,000), constitute the present East Indian Railway Company, which, since the purchase, has worked the railway for the Government under the contract of 1879 as modified by the contract of 1899. The deferred annuity holders receive, in lieu of the annuity, interest at 4 per cent. per annum on £6,550,000 and a share of the surplus profits of the railway. On the determination of the contract, the portion of the annuity that has been deferred will become payable for the period remaining up to the 14th February 1953.

Currency of contracts.—The contract of 1879 terminates on the 31st December 1929, but either party may determine the contract at the end of the 20th or at the end of any succeeding 5th year (computed from the 1st of January 1880) on giving two clear years' notice in writing to the other party of this intention.

Notes.—Government relinquished their right to determine the contract at the end of the 20th year, and by mutual agreement the principal contract will not be determined before the 31st December 1910.

Power of Company to surrender contract.—See currency of contracts.

Terms of working.—After deducting working expenses (which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 25,000 in each half-year and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) the surplus profits (after payment of interest on debentures, annuity, interest on deferred portion of annuity, interest due to Government on capital advances, etc., and contribution to the Provident Fund) up to a sum of 25 lakhs of rupees are divided

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 4 Sub-heads (a) to (d) EAST INDIAN RAILWAY SYSTEM—contd.

4 (a) East Indian railway proper (5' 6" gauge)—contd.

Terms of contracts—contd.

in proportion of four-fifths to Government and one-fifth to the Company. Any excess over 25 lakhs of rupees is divided in proportion of fourteen-fifteenths to Government and one-fifteenth to the Company.

Rates and fares.—Certain maxima and minima rates and fares have been fixed within which the Company is permitted to vary rates.

Statistics of working —

TABLE I.

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Annuity.	Company's share of net earnings.	Gain or loss to the State.	REMARKS.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1879	31,32,77,360	4,35,16,730	2,86,14,479	8.34	1,65,74,363	...	61,25,877	+ 59,14,239	
1880	31,35,77,317	4,33,04,947	2,86,72,015	8.35	*1,98,06,263	...	17,72,690	+ 70,93,082	* Interest in 1880 includes annuity charges, which cannot be separated.
1881	31,87,63,677	4,54,11,472	3,08,35,036	8.84	31,05,426	1,73,92,000	20,63,867	+ 82,73,743	
1882	35,07,21,155	4,71,17,594	2,96,57,086	8.46	32,81,761	1,73,92,000	17,88,073	+ 71,95,249	
1883	35,21,91,304	4,94,67,085	3,11,50,980	8.84	34,16,170	1,72,57,772	19,99,731	+ 80,77,307	
1884	35,57,38,760	4,38,34,714	2,73,22,003	7.68	35,58,035	1,78,50,459	11,72,323	+ 47,41,188	
1885	35,85,96,619	4,64,86,914	3,30,16,960	9.21	38,13,262	1,79,74,714	16,29,502	+ 95,98,182	
1886	36,06,85,918	4,66,70,873	3,05,13,359	8.46	39,01,104	1,89,50,137	14,97,276	+ 60,74,842	
1887	36,12,14,641	4,60,65,661	2,13,34,263	8.67	40,70,944	1,92,13,333	15,87,252	+ 61,63,734	
1888	36,09,27,530	4,54,36,992	3,03,35,075	8.40	40,73,397	2,03,13,530	11,64,693	+ 47,53,555	
1889	36,19,22,300	4,49,57,901	2,94,05,230	8.12	41,84,108	2,09,60,000	8,31,347	+ 31,28,775	
1890	36,21,22,758	4,40,57,665	2,98,26,815	8.24	41,83,278	2,03,13,530	10,37,019	+ 42,62,988	
1891	36,15,18,827	4,56,87,001	3,60,37,028	9.97	43,93,126	1,86,91,054	26,45,392	+ 1,03,04,156	
1892	36,24,97,506	4,91,11,600	3,48,16,719	9.60	37,25,754	2,06,47,164	20,88,760	+ 83,55,041	
1893	36,91,20,357	5,08,44,634	3,60,94,293	9.78	41,26,889	2,34,46,780	17,04,125	+ 68,16,499	
1894	37,24,36,356	5,26,89,485	3,64,26,405	9.78	43,37,988	2,43,89,582	15,39,767	+ 61,59,068	
1895	37,82,18,029	5,11,50,856	3,78,34,726	10.00	45,73,681	2,61,01,122	14,29,078	+ 57,30,845	
1896	38,27,66,003	5,40,69,142	3,67,77,682	9.61	46,90,562	2,78,19,455	12,45,733	+ 49,81,932	
1897	39,30,91,173	5,88,28,013	4,11,93,469	10.33	48,20,138	2,47,14,406	2,48,763	+ 95,51,062	
1898	40,71,94,336	5,97,96,060	4,08,07,269	10.02	50,16,114	2,32,64,533	24,99,244	+ 99,96,978	
1899	42,70,40,208	6,35,45,974	4,26,60,018	9.99	54,64,902	2,21,45,516	30,99,920	+ 1,20,39,680	
1900	44,28,43,540	6,84,74,972	4,47,15,571	10.10	60,18,054	2,15,60,963	18,09,104	+ 1,53,27,150	
1901	45,66,50,069	7,03,96,636	4,57,13,311	10.01	65,46,878	2,16,82,369	18,51,450	+ 1,56,32,623	
1902	47,06,40,852	6,77,38,713	4,29,89,833	9.13	70,34,492	2,16,46,868	16,19,935	+ 1,26,79,508	
1903	48,79,61,154	6,90,72,699	4,63,98,432	9.52	74,46,371	2,16,15,609	16,82,241	+ 1,56,54,820	
1904	50,26,09,029	7,59,71,544	5,05,64,422	10.06	80,23,978	2,16,15,000	20,64,276	+ 1,88,61,168	
1905	52,58,72,727	7,56,47,139	4,81,55,134	9.16	86,75,860	2,16,15,000	18,62,075	+ 1,60,33,109	
1906	54,79,28,499	8,02,50,910	4,87,80,504	8.90	94,14,920	2,16,15,000	18,50,039	+ 1,59,00,545	

TABLE II.

Calendar year.	East Indian (5' 6" gauge).		Patna-Gya (5' 6" gauge).		Nalhati (4' 0" gauge).		Dildarnagar-Ghazipur (5' 6" gauge).		Calendar year.	East Indian (5' 6" gauge).		Patna-Gya (5' 6" gauge).		Nalhati (4' 0" gauge).		Dildarnagar-Ghazipur (5' 6" gauge).	
	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.		Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.
1854	Rs. 131	62.18	...	...	...	...	...	...	1881	Rs. 578	31.85	Rs. 173	65.11	Rs. 47	79.20	Rs. 63	99.52
1855	108	51.97	...	...	...	...	...	...	1882	601	36.94	184	60.51	51	73.05	73	85.24
1856	167	40.62	...	...	...	...	...	...	1883	630	36.95	159	51.93	57	69.63	80	49.87
1857	232	38.12	...	...	...	...	...	...	1884	558	37.61	174	57.48	55	90.44	75	58.37
1858	279	46.49	...	...	...	...	...	...	1885	589	35.25	174	52.52	54	82.08	75	52.28
1859	253	44.77	...	...	...	...	...	...	1886	591	34.59	180	52.01	59	85.29	76	52.05
1860	231	48.36	...	...	...	...	...	...	1887	583	31.70	178	46.53	65	70.57	77	46.45
1861	240	46.40	...	...	...	...	...	...	1888	567	23.24	168	47.07	74	78.39	74	91.13
1862	192	53.81	...	...	...	...	...	...	1889	557	34.59	175	48.70	73	78.18	...	...
1863	223	55.01	...	...	...	...	...	...	1890	538	31.35	174	45.80	71	78.01	...	...
1864	253	50.79	...	...	36	48.88	...	...	1891	615	27.21	204	42.76	66	62.97	...	...
1865	311	44.82	...	...	41	63.28	...	...	1892	587	28.47	193	42.94	...	...	...	...
1866	374	44.24	...	...	36	105.15	...	...	1893	584	27.44	...	...	...	...	...	...
1867	369	48.91	...	...	45	68.81	...	...	1894	604	30.87	...	...	...	...	...	...
1868	346	44.48	...	...	57	83.60	...	...	1895	608	31.07	...	...	...	...	...	...
1869	899	44.42	...	...	60	59.64	...	...	1896	597	31.98	...	...	...	...	...	...
1870	424	43.68	...	...	60	48.77	...	...	1897	649	29.47	...	...	...	...	...	...
1871	398	43.36	...	...	55	58.07	...	...	1898	658	31.76	...	...	...	...	...	...
1872	368	41.44	...	...	53	57.14	...	...	1899	697	32.84	...	...	...	...	...	...
1873	382	38.75	...	...	60	60.06	...	...	1900	708	34.78	...	...	...	...	...	...
1874	474	35.70	...	...	61	67.22	...	...	1901	733	35.06	...	...	...	...	...	...
1875	374	39.68	...	...	57	76.42	...	...	1902	687	36.55	...	...	...	...	...	...
1876	452	35.08	...	...	54	111.15	...	...	1903	692	33.64	...	...	...	...	...	...
1877	505	31.85	...	...	64	100.47	...	...	1904	749	33.39	...	...	...	...	...	...
1878	507	35.69	...	...	64	79.41	...	...	1905	788	35.74	...	...	...	...	...	...
1879	552	32.88	121	55.84	65	67.56	...	...							
1880	649	33.04	162	56.18	49	105.33	58	128.33	1906	(a) 732	(a) 38.65	...	...	...	...	...	...

(a) Includes the South Behar railway which is now worked as part of the undertaking.

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 4} _{Sub-heads (a) to (d)} **EAST INDIAN RAILWAY SYSTEM—contd.**

4 (b) Delhi-Umballa-Kalka railway (5' 6" gauge)—*Chairman.*—Colonel Alexander Jerome Filgate, R.E.*Secretary.*—C. E. Rutter, Esq.*Offices.*—17, Victoria Street, Westminster, S. W.**Details of construction—**

This railway is 162.36 miles long. It was opened throughout in 1891.

Permanent-way.—The permanent-way consists of double-headed steel rails, 75 lbs. to the yard, laid on Denham Olpherts' cast-iron plate and wooden sleepers with cast iron chairs.*Ballast.*—The line is ballasted throughout with stone.*Fencing.*—The line is fenced throughout.*Curves.*—The sharpest curve is of 1,010 feet radius.*Gradients.*—The ruling gradient is 1 in 200, except for 15 miles from Kalka where it is 1 in 40.**Terms of contracts—**

The railway is worked under the following contracts:—

Contracts of—24th January 1889 (between the Secretary of State and the East Indian Railway Company) for working.
12th February 1889 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) for construction.

19th March 1890 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) for raising of additional capital by the issue of debentures.

19th December 1895 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) conceding to the Company from the 1st January 1893 the $\frac{3}{4}$ per cent. of gross earnings previously retained by Government.

24th July 1896 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) for the provision of funds for capital works.

9th June 1897 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) guaranteeing interest at the rate of $3\frac{1}{2}$ per cent. on share capital.

The general conditions of the contracts are as follows:—

Government aid.—By the contract of 9th June 1897 Government supplement the net earnings of the Company for the year 1896 and each succeeding year by such an annual subsidy as will enable the Company, after payment of debenture interest, to pay a dividend of $3\frac{1}{4}$ per cent. per annum on their share capital. Land was also provided free of cost.*Currency of contracts.*—The contracts may be determined by effluxion of time on the 31st December 1916, unless some arrangement is effected for continuing the working. Should such arrangement be made, Government may determine the contracts on the 31st December 1926 or on the 31st December of any subsequent tenth year. On determination Government are to receive possession of the railway, and to pay the Company a sum equal to 25 times the average yearly profits of the Company during the preceding five years. Subsidy payments by Government are to be excluded from the profits of the Company in calculating the price to be paid on purchase by Government.*Power of Company to surrender contracts.*—Nil.*Terms of working.*—Government undertake (through the agency in the first instance of the East Indian Railway Company) to supply the necessary rolling-stock and to work and maintain the line until the 31st December 1916, taking 48 per cent. of the gross receipts of the railway for the working agency (which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' and a payment of Rs. 10 for every mile of line open to traffic to be made half-yearly to Government for supervision) and paying 52 per cent. to the Company. Surplus profits in excess of $3\frac{1}{4}$ per cent. per annum are divided equally between Government and the Company until Government have been repaid advances of subsidy, with interest. Thereafter all surplus profits belong to the Company.*Rates and fares.*—To be agreed upon from time to time between the Secretary of State and the working agency; but in the case of that portion of the line between Delhi and Umballa they are to be not more than the maximum, nor less than the minimum, rates and fares in force on the East Indian railway, and in the case of the portion between Umballa and Kalka not more than three times such maximum nor less than such minimum.**Statistics of working—**

TABLE I.								TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Subsidy from Government.	Total income.	Percentage of total income on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1889	54,90,335	...	...	...	...	...	...	...	...
1890	1,35,55,560	...	...	...	...	...	...	...	...
1891	1,55,41,692	9,07,697	4,72,002	3.04	...	4,72,002	3.04	128	48.00
1892	1,58,22,137	10,81,769	5,62,520	3.56	...	5,62,520	3.56	129	48.00
1893	1,55,21,600	11,98,508	6,23,224	4.01	...	6,23,224	4.01	143	48.00
1894	1,55,25,517	13,37,526	6,95,514	4.48	...	6,95,514	4.48	159	48.00
1895	1,55,06,120	14,60,519	7,59,470	4.90	...	7,59,470	4.90	174	48.00
1896	1,54,49,783	13,18,840	6,85,797	4.44	...	6,85,797	4.44	158	48.00
1897	1,53,26,585	15,73,319	8,18,126	5.34	...	8,18,126	5.34	166	48.00
1898	1,53,43,587	16,07,512	8,35,906	5.45	...	8,35,906	5.45	191	48.00
1899	1,53,01,272	14,49,378	7,29,511	4.77	...	7,29,511	4.77	172	48.00
1900	1,53,16,467	13,72,523	7,13,712	4.66	...	7,13,712	4.66	163	48.00
1901	1,52,92,648	18,05,858	9,39,046	6.14	...	9,39,046	6.14	218	48.00
1902	1,54,23,791	18,66,695	9,70,681	6.29	...	9,70,681	6.29	221	48.00
1903	1,55,49,998	18,30,960	9,52,099	6.12	...	9,52,099	6.12	216	48.00
1904	1,55,51,768	18,58,478	9,63,807	6.19	...	9,63,807	6.19	218	48.00
1905	1,56,07,490	20,16,936	10,48,807	6.72	...	10,48,807	6.72	238	48.00
1906	1,57,26,333	20,04,218	10,42,194	6.63	...	10,42,194	6.63	237	48.00

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 4} Sub-heads (a) to (d) **EAST INDIAN RAILWAY SYSTEM—contd.**

4 (c) South Behar railway (5' 6" gauge)—

Chairman.—Sir Henry S. Cunningham, K.C.I.E.

Secretary.—E. Z. Thornton, Esq.

Offices.—1st, Queen Anne's Gate, Westminster, S. W.

Details of construction—

This railway is 78.76 miles long. It connects Luckeeserai with Gya and was opened in 1899.

Permanent-way.—The permanent-way consists of double-headed steel rails, 75 lbs. to the yard, laid on wooden sleepers and cast-iron chairs, and Denham Olpherts' cast-iron plate sleepers.

Ballast.—The line is ballasted throughout with stone.

Fencing.—The line is fenced only near villages, at stations and for a short distance on each side of level crossings.

Curves.—The sharpest curve is of 3,000 feet radius.

Gradients.—The ruling gradient is 1 in 400.

Terms of contracts—

The railway is worked under the following contracts:—

Contracts of—7th August 1895 (between the Secretary of State and the South Behar Railway Company) for construction.

22nd August 1895 (between the Secretary of State and the East Indian Railway Company) for working.

The general conditions of the contracts are as follows:—

**Government aid.*—Government, in respect of each half-year, allow to the South Behar Railway Company, by way of rebate on the share attributable to the East Indian railway of the receipts from traffic interchanged between the two railways, a sum not exceeding 30 per cent. of such share as will, together with the net earnings of the South Behar Railway Company, make up an amount equal to interest for the half-year at the rate of 4 per cent. per annum on the actual capital expenditure on the South Behar railway. For the purpose of calculating this rebate, the capital expenditure is to be regarded as not exceeding Rs. 120 lakhs, and the amount towards making up of which the rebate is to be allowed is to be limited to Rs. 2,40,000 in any half-year. Land was also provided free of cost.

Currency of contracts.—Government have power to determine the contracts on the 30th June 1919, or at the end of any subsequent period of 10 years from that date, by giving twelve months' notice. In case of such determination, the Government will pay to the Company in England an amount equal to the total paid up capital in sterling, so far as such capital has been expended on the undertaking with the authority of the Secretary of State.

Power of Company to surrender contracts.—Nil.

**Terms of working.*—For the first two years after the opening of any section, the cost of maintenance was charged against capital, Government retaining only 35 per cent. of the gross earnings for providing rolling-stock and working the line, the remaining 65 per cent. going to the Company. Thereafter, Government retain 45 per cent. of the gross earnings (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work' and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) to meet the cost of maintaining, stocking and working the line, the Company taking the remaining 55 per cent.

**Rates and fares.*—To be agreed upon from time to time between the Government and the working agency within the maxima and minima rates and fares in force on the East Indian railway.

[*Note.—It has since been agreed between the Secretary of State and the South Behar Railway Company that, in lieu of the net receipts as provided by clause 30 of the contract of the 7th August 1895, a fixed sum by way of rental at the rate of £10,000 per annum as from the 1st January 1918 will be paid to the Company by the Secretary of State. The clauses of the same contract relating to the application of gross earnings, rebate, net receipts, maintenance and working, rates and fares, and other clauses similarly affected, by the new agreement, will be cancelled, and provision made for the use and working of this railway, and the making of any alterations, improvements or additions by the Secretary of State, at his own risk and cost, free from control or interference by the Company. It has also been arranged between the Secretary of State and the East Indian Railway Company that the latter shall work the South Behar Railway as part of their undertaking, instead of on the terms of the contract of the 22nd August 1895, the annual rental of £10,000 payable to the South Behar Railway Company, together with interest at 3½ per cent. on the government advances for the purposes of the South Behar line forming a charge against the net revenue of the undertaking.]

Statistics of working—

TABLE I.								TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percent- age on capital outlay.	Rebate from E. I. Ry.	Total income.	Percent- age of total income on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1895	5,17,983	...	...	...	...	...	...	...	...
1896	30,68,036	...	...	...	...	...	...	...	...
1897	62,72,345	...	...	...	...	...	...	...	...
1898	97,45,791	...	...	...	...	...	...	...	...
1899	1,18,16,730	2,03,328	1,32,163	1.12	33,403	1,65,566	1.40	101	35.00
1900	1,23,15,110	4,67,133	3,03,646	2.47	1,44,404	4,48,040	3.64	114	35.00
1901	1,23,66,533	6,11,870	3,08,822	2.50	1,28,082	4,36,904	3.53	125	40.02
1902	1,19,88,612	4,99,809	2,74,895	2.29	1,35,445	4,10,340	3.42	123	45.00
1903	1,20,01,897	5,21,005	2,88,533	2.40	1,57,708	4,46,241	3.72	128	45.00
1904	1,19,72,914	5,70,358	3,13,697	2.62	1,65,342	4,79,079	4.00	133	45.00
1905	1,19,77,154	5,55,199	3,05,360	2.55	1,72,721	4,78,081	3.99	135	45.00
1906	1,19,74,947	...	See note above.	...	...	...	...	...	...

4 (d) Tarkessur railway (5' 6" gauge)—

Details of construction—

This railway, which connects Seoraphuli, a station on the East Indian railway, with Tarkessur, is 22.23 miles long. Its construction was sanctioned in 1883 and it was opened in 1885.

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 4} _{Sub-heads (a) to (d)} **EAST INDIAN RAILWAY SYSTEM—concl'd.****4 (d) Tarkessur railway (5' 6" gauge)—concl'd.****Details of construction—concl'd.***Permanent-way.*—The permanent-way consists of 74-1b³ iron rails laid on Denham Olpherts' cast-iron plate sleepers.*Ballast.*—The line is ballasted throughout with stone.*Fencing.*—The line is fenced throughout.*Curves.*—The sharpest curve is of 2,700 feet radius.*Gradients.*—The ruling gradient is 1 in 500.**Terms of contracts—**

The railway is worked under the following contracts:—

Contracts of—8th September 1883 (between the Secretary of State and the Tarkessur Railway Company) for construction.

15th September 1887 (between the Secretary of State and the East Indian Railway Company) for working.

1st March 1888 (between the Secretary of State and the Tarkessur Railway Company) for working.

The general conditions of the contracts are as follows:—

Government aid.—Land was provided free of cost.*Currency of contracts.*—The contract of 1883 terminates on the 7th September 1982; but the Secretary of State, by giving twelve months' previous notice, has the power to determine the contract after the railway has been opened for thirty years and thereafter at intervals of ten years. In the event of such determination Government will pay the Company a sum equal to the aggregate net profits during the twenty years preceding.*Power of Company to surrender contracts.*—Nil.*Terms of working.*—From the gross earnings are deducted working expenses (which may include capital expenditure classed as 'Minor Works' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year and a payment of Rs. 49 for every mile of line open to traffic to be made half-yearly to Government for supervision) calculated at the same percentage of the gross earnings as obtains on the East Indian railway system as a whole; 5 per cent. of the gross earnings for the hire of rolling-stock; and contribution to the Provident Fund. The balance is divided in the proportion of four-fifths to the Tarkessur Railway Company and one-fifth to the East Indian Railway Company.*Rates and fares.*—Certain maxima have been fixed, and the Company is authorized to charge within those maxima such rates and fares as may from time to time be mutually agreed upon.**Statistics of working—**

TABLE I.				TABLE II.		
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on Capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1885	16,88,095	2,62,313	1,21,124	7.37	227	52.57
1886	17,24,717	2,49,003	1,19,136	6.91	215	52.15
1887	17,28,410	2,63,792	1,32,274	7.65	228	49.86
1888	17,31,822	2,79,717	1,36,780	7.84	242	51.10
1889	17,28,138	2,84,895	1,36,573	7.90	246	55.51
1890	17,28,773	2,86,526	1,44,283	8.35	248	49.61
1891	17,29,021	3,05,132	1,63,478	9.45	264	48.42
1892	17,32,567	2,93,674	1,54,857	8.94	254	47.28
1893	17,47,280	2,83,051	1,50,420	8.61	245	48.86
1894	17,47,840	3,06,159	1,56,469	8.95	265	48.96
1895	17,53,940	3,08,156	1,59,991	9.07	267	48.37
1896	17,56,898	3,13,243	1,57,005	8.95	271	49.88
1897	17,57,160	3,12,656	1,62,563	9.25	270	48.01
1898	17,77,045	3,14,056	1,58,461	8.92	272	49.54
1899	17,84,166	3,08,739	1,52,491	8.55	267	50.58
1900	17,84,166	3,32,905	1,61,132	9.03	288	51.61
1901	17,92,093	3,30,300	1,57,923	8.81	285	52.23
1902	17,91,612	3,28,510	1,55,348	8.56	283	53.33
1903	17,93,985	3,33,924	1,63,741	9.13	288	50.96
1904	17,97,555	3,30,635	1,63,006	9.07	284	50.76
1905	17,98,615	3,26,715	1,55,221	8.63	282	52.49
1906	17,99,166	3,51,688	1,58,989	8.84	304	54.92

Number ^{Main head 5} _{Sub-heads (a) to (h)} **GREAT INDIAN PENINSULA RAILWAY SYSTEM—***Chairman.*—Rt. Hon'ble Sir Andrew R. Seoble, K.C.S.I.*Managing Director.*—Colonel F. Firebrace, R.E.*Offices.*—48, Copthall Avenue, E. C., London.**Lines comprising the system.**—The Great Indian Peninsula railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(a) Great Indian Peninsula railway (5' 6" gauge)	1,561.63	45.78	1,607.41
(b) Agra-Delhi Chord railway (5' 6" gauge)	125.90	...	125.90
(c) Bhopal-Itarsi railway (5' 6" gauge)	57.39	...	57.39
(d) Bhopal-Ujjain railway (5' 6" gauge)	113.27	...	113.27
(e) Bina-Goonn-Baran railway (5' 6" gauge)	148.63	...	148.63
(f) Indian Midland railway (5' 6" gauge)	809.85	...	809.85
(g) Gwalior Light railway (2' 0" gauge)	183.53	66.39	249.92
(h) Matheran Light railway (2' 0" gauge)	...	12.61	12.61
Total	2,957.29	124.78	3,122.07

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 5 **GREAT INDIAN PENINSULA RAILWAY SYSTEM—contd.**
Sub-heads (a) to (h)
Running powers—

Home line over foreign lines :—

Dadar junction to Colaba, Bombay, Baroda and Central India railway, for goods trains only	7.25
At Agra, Rajputana-Malwa railway, for passenger and goods trains	2.89
At Cawnpore, East Indian railway, 0.97 mile, for passenger trains and 0.52 mile for goods trains	1.40
At Mankpore, East Indian railway, for passenger and goods trains	0.63
At Katni, East Indian railway, for goods trains only	0.38
At Katni, Bengal-Nagpur railway, for passenger train only	1.80
At Ujjain, Bombay, Baroda and Central India railway, for passenger and goods trains	0.24
At Cawnpore, Oudh and Rohilkhand (State) railway, for passenger and goods trains	0.86
From Cawnpore to Lucknow, Oudh and Rohilkhand (State) railway, for passenger and goods trains	44.63
Total	59.97

Foreign lines over home line :—

Bombay, Baroda and Central India railway, Dadar Junction to Carnao bridge, for goods trains only	Miles. 4.39
Bengal-Nagpur railway at Nagpur for passenger and goods trains	0.65
Total	5.04

5 (a) Great Indian Peninsula railway proper (5' 6" gauge) —

This line was purchased by the State in 1900, but the working was left in the hands of the Company under the terms of a new Contract, dated the 21st December 1900.

Details of construction—

The open mileage of the Great Indian Peninsula railway proper is 1,561.63 miles. This may be divided into (1) *North-East line*, main line (Bombay to Jabulpore), 615.10 miles; branches, 384.99 miles; (2) *South-East line*, main line (Kalyan to Raichur), 408.86 miles; branches, 152.63 miles. Of the above 567.43 miles are double and 4.92 miles quadruple line.

There are under construction 45.78 miles of single line.

First sanction to the construction of the North-East line was given in 1850 and it was opened throughout in 1870. The South-East line was sanctioned in 1854 and it was opened throughout in 1871.

Permanent-way.—The main line is laid with 86-lb. double-headed, 82-lb. bull-headed and 69-lb. double-headed steel rails. The sleepers originally laid were chiefly wooden; these have now to a large extent been replaced by iron pots. The whole of the South-East line, except the ghat sections, is laid with iron pots.

Ballast.—The line is fully ballasted throughout with sand gravel or broken stone.

Fencing.—With the exception of the Mohpani, Chaligaon-Daulia, and Jalgaon-Amalner branches the line is fully fenced.

Curves.—The sharpest curve has a radius of 990 feet.

Gradients.—The ruling gradients on ordinary sections of the main line vary from 1 in 100 to 1 in 200, with 1 in 100 banking sections near Vasiud and Asvali; the ruling gradient on the ghat sections is 1 in 37.

Terms of contract—

The railway is worked under the following contract :—

Contract of—21st December 1900 for working the Great Indian Peninsula railway and Indian Midland railway systems as one undertaking.

The general conditions of the contract are as follows :—

Government aid.—Government to pay interest at 3 per cent. per annum on the amount for the time being paid up, or credited as paid up, on the shares or stock in the new capital of the Great Indian Peninsula Railway Company, which is at present authorised at £2,575,000. All capital will be provided by the Secretary of State bearing interest at the rate of 3½ per cent. per annum, or at such other rate as may be agreed upon; or will be raised by the Company, by the issue of debentures or debenture stock, at such rate of interest as the Secretary of State may determine. Land was provided free; but any land acquired after 30th June 1900 is paid for from the capital of the undertaking.

Terms of contract.—The line was purchased from the Great Indian Peninsula Guaranteed Railway Company by the State in 1900, when all the contracts then subsisting between the Secretary of State and that Company were determined. The purchase price was £40,781,568,* payable, up to the 17th August 1949, in the form of a terminable annuity of £1,268,516.

* Company's stock at date of purchase . . . 34,850,218

Debentures and debenture stock . . . 5,922,350

Total . . . 40,781,568

Currency of contract.—The contract is current for a period of 25 years from the 1st July 1900, when it will be determinable by the Secretary of State, paying the amounts paid or credited on all shares and stock and indemnifying the Company from all debts and liabilities incurred under sanction.

Power of Company to surrender contract.—Nil.

Terms of working.—From the gross earnings of the undertaking, that is of the Great Indian Peninsula and Indian Midland railways, there will be deducted—

(i) The working expenses, which may include any single item of capital expenditure not exceeding Rs. 2,000 to be classed as a 'Minor Work', subject to a maximum charge on such account of Rs. 25,000 in each half-year and a payment of Rs. 40 per mean mile worked to be made half-yearly to Government for supervision;

(ii) A sum of Rs. 1,00,00,000 which is payable to Government;

(iii) Repayment of all interest payable on all moneys other than shares or capital stock raised for the purposes of the undertaking or provided by Government after the 30th June 1900.

If the receipts for any year ending on the 30th day of June exceed the payments as above detailed for the same period, 18ths of the surplus are paid to the Secretary of State and 10th to the Company; provided that if the Company increases its new capital and issues further shares or stock as fully paid up in exchange for stock of the Indian Midland Railway Company, the Company's share in such surplus shall be increased by an additional fractional share bearing the same proportion to the original fractional share of 1/18th as the additional capital of the Company so exchanged bears to the new authorised capital of £2,575,000, but the total fractional share of the Company is not to exceed a one-tenth share.

Rates and fares.—Certain maxima and minima have been fixed within which the Company is permitted to vary its rates.

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 112.]

Number ^{Main head 5} _{Sub-heads (a) to (h).} GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*5 (a) Great Indian Peninsula railway proper (5' 6" gauge)—*contd.*

Statistics of working—

TABLE I.									TABLE II.		
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Guaranteed interest.	Annuity.	Company's share of net earnings.*	Gain or loss to the State.	Calendar year.	Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.	%	Rs.	Rs.	Rs.	Rs.		Rs.	
1879 . . .	25,50,50,152	2,52,18,315	1,01,90,602	3.98	1,24,45,846	...	6,31,091	-28,89,335	1853 . . .	119	45.90
1880 . . .	25,58,96,113	2,49,53,253	1,11,65,551	4.34	1,24,93,200	...	5,53,436	-19,41,485	1854 . . .	88	60.81
1881 . . .	25,75,86,095	3,20,56,823	1,61,74,097	6.28	1,24,93,200	...	18,23,748	+18,57,149	1855 . . .	89	70.21
1882 . . .	25,75,90,499	3,53,63,291	1,80,88,483	7.02	1,24,93,200	...	32,05,883	+23,89,400	1856 . . .	118	42.17
1883 . . .	26,07,58,700	3,51,14,363	1,75,36,005	6.72	1,25,12,825	...	33,22,918	+17,00,262	1857 . . .	138	45.27
1884 . . .	26,31,97,600	3,36,56,544	1,59,55,250	6.06	1,42,81,503	...	24,76,048	-8,02,301	1858 . . .	173	42.19
1885 . . .	26,81,43,316	3,64,32,047	1,79,31,397	6.68	1,51,17,467	...	26,97,344	+1,16,586	1859 . . .	172	51.19
1886 . . .	26,92,99,673	3,92,57,907	2,08,78,390	7.75	1,60,91,158	...	59,89,569	+7,97,653	1860 . . .	144	60.97
1887 . . .	27,03,76,543	3,99,27,468	2,10,80,217	7.80	1,66,44,563	...	41,04,068	+3,32,601	1861 . . .	130	76.35
1888 . . .	27,25,93,364	4,16,59,219	2,16,35,667	7.94	1,72,81,176	...	43,31,246	+2,24,245	1862 . . .	149	62.62
1889 . . .	27,50,39,981	3,70,68,814	1,78,91,616	6.51	1,74,92,160	...	26,82,255	-22,92,799	1863 . . .	175	67.55
1890 . . .	27,77,29,064	3,81,45,242	1,90,22,952	6.85	1,55,23,271	...	31,04,971	+3,94,710	1864 . . .	119	72.07
1891 . . .	27,75,19,781	4,52,55,333	2,32,50,708	8.38	1,67,57,262	...	51,59,003	+13,04,458	1865 . . .	414	59.54
1892 . . .	27,72,17,255	4,04,65,627	2,01,95,097	7.28	1,82,04,314	...	38,13,596	-21,22,723	1866 . . .	357	56.07
1893 . . .	27,72,93,860	3,58,13,742	1,79,90,922	6.49	1,91,65,618	...	29,27,476	-41,00,172	1867 . . .	368	55.69
1894 . . .	27,91,09,112	3,62,74,296	1,62,42,786	5.82	2,18,32,651	...	39,49,331	-86,30,196	1868 . . .	357	61.80
1895 . . .	27,95,39,235	3,37,90,194	1,47,16,901	5.26	2,16,97,060	...	16,20,361	-86,09,520	1869 . . .	348	67.79
1896 . . .	27,90,29,173	3,44,19,629	1,54,05,060	5.52	2,02,18,772	...	21,53,257	-69,97,069	1870 . . .	300	62.25
1897 . . .	27,92,65,611	2,84,32,102	93,83,654	3.36	1,89,46,479	...	...	-95,62,825	1871 . . .	307	63.98
1898 . . .	28,19,37,621	3,48,77,406	1,41,02,053	5.00	1,83,20,513	...	19,57,327	-58,75,787	1872 . . .	284	61.25
1899 . . .	28,55,49,756	3,58,09,131	1,56,57,520	5.48	1,79,65,944	...	17,77,632	-40,85,456	1873 . . .	281	64.09
1900 { 1st half } { 2nd half }	30,27,49,717	3,46,31,925	{ 95,37,130 66,30,083 }	{ 3.15 2.19 }	{ 89,65,500 24,34,267 }	{ ... 94,88,889 }	{ 14,48,203 ...	{ -8,76,573 -52,03,673 }	1874 . . .	303	59.17
1901 . . .	30,38,67,185	4,16,57,453	2,16,48,151	7.12	48,06,908	1,90,87,970	2,72,210	-26,06,937	1875 . . .	324	47.28
1902 . . .	30,57,71,091	4,23,12,668	2,10,78,893	6.80	49,41,692	1,90,56,785	2,92,872	-32,17,456	1876 . . .	369	47.60
1903 . . .	31,08,58,053	4,68,61,554	2,38,12,514	7.66	50,66,786	1,90,28,730	3,26,878	-6,09,880	1877 . . .	492	48.30
1904 . . .	32,00,72,108	4,82,41,344	2,41,79,728	7.55	53,09,707	1,90,28,730	2,91,513	-4,50,352	1878 . . .	429	48.91
1905 . . .	32,65,20,022	5,22,33,877	2,70,20,162	8.31	57,59,430	1,90,28,730	4,63,709	+17,68,213	1879 . . .	383	49.64
1906 . . .	33,57,84,978	5,05,28,479	2,53,01,900	7.54	61,20,668	1,90,28,730	4,70,548	-3,18,044	1880 . . .	872	55.49
									1881 . . .	426	49.40
									1882 . . .	470	48.00
									1883 . . .	466	48.67
									1884 . . .	502	53.31
									1885 . . .	467	50.46
									1886 . . .	503	48.49
									1887 . . .	511	46.84
									1888 . . .	526	46.96
									1889 . . .	494	51.42
									1890 . . .	508	49.80
									1891 . . .	584	48.25
									1892 . . .	525	49.98
									1893 . . .	501	53.87
									1894 . . .	468	55.18
									1895 . . .	476	56.89
									1896 . . .	444	53.20
									1897 . . .	367	66.96
									1898 . . .	450	59.49
									1899 . . .	492	53.76
									1900 . . .	439	52.49
									1901 . . .	518	48.09
									1902 . . .	523	50.18
									1903 . . .	575	49.18
									1904 . . .	592	49.88
									1905 . . .	641	48.27
									1906 . . .	623	49.92

* Based on actual receipts and payments during the year.

[For Index see page 112.]

5 (a) Great Indian Peninsula railway proper (5' 6" gauge)—*concl'd.*

Statistics of working—conclud.

	WARDHA COAL BRANCH.						DHOND-MANMAD BRANCH.									
Calendar year.	TABLE I.						TABLE II.		TABLE I.						TABLE II.	
	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Gain or loss to the State.	Earnings per mile per week.	Pro. of exp. to earnings.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Gain or loss to the State.	Earnings per mile per week.	Pro. of exp. to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1873	55,93,772	1,63,158	6,073	0.11	2,51,134	-2,15,361	69	81.64	98,30,308	1,67,557	-27,661	...	1,07,525	-4,35,189	62	105.02
1880	57,32,921	3,02,879	-1,31,730	...	2,37,032	-3,89,762	65	162.90	1,07,29,227	6,35,094	65,115	0.61	4,76,299	-4,11,154	91	87.31
1881	58,80,993	1,75,988	1,95,447	2.63	2,37,916	-1,18,169	137	101.35	99,49,546	6,33,862	1,22,588	1.23	3,33,138	-2,70,850	*	*
1882	60,91,189	5,95,622	98,237	1.63	2,38,834	-1,40,547	285	76.80	19,22,116	7,9,558	1,59,131	1.60	3,97,802	-2,38,610	*	*
1883	63,93,758	7,41,762	5,89,882	9.23	2,47,902	-3,41,780	126	19.80	1,00,64,756	8,22,833	1,92,133	1.91	4,92,585	-2,10,446	109	76.65
1884	66,20,611	6,81,037	2,11,860	3.20	2,51,176	-4,19,316	121	61.80	1,02,49,438	8,77,160	2,03,785	1.99	4,08,233	-2,04,498	116	76.77
1885	66,65,755	6,73,619	1,16,395	2.20	2,51,219	-1,17,924	108	83.66	1,02,63,278	9,07,422	2,20,623	2.15	4,10,544	-1,89,921	...	...
1886	71,93,093	7,82,205	1,35,366	1.90	2,51,218	-1,42,292	114	92.23	99,39,715	9,84,418	2,33,594	2.14	4,31,493	-1,96,589	...	...
1887	71,90,635	7,63,052	1,31,931	1.86	2,50,163	-1,37,484	125	80.76	1,09,46,965	9,60,399	2,27,538	2.08	4,37,893	-2,10,555	...	...
1888	70,91,230	8,71,430	1,95,920	2.79	2,84,523	-86,569	135	71.21	1,09,75,117	10,31,762	2,55,145	2.33	4,38,451	-1,83,018	...	...
1889	70,54,755	8,62,694	2,99,621	4.25	2,84,841	-4,16,717	112	57.24	1,09,88,830	10,08,616	2,49,127	2.27	4,39,319	-1,89,592	...	...
1890	70,96,181	9,33,126	2,77,901	3.93	2,81,206	-4,32,953	119	63.64	1,09,93,444	10,61,316	2,43,134	2.39	4,39,629	-1,76,495	...	...
1891	49,81,196	2,88,971	1,09,553	1.21	2,93,779	-1,43,726	...	...	1,10,41,639	11,99,349	3,05,583	2.79	4,40,296	-1,31,713	...	...
1892	49,87,689	2,32,153	31,996	0.68	1,99,337	-1,68,241	...	...	1,12,72,925	12,18,412	3,48,323	2.96	4,42,345	-1,44,290	...	...
1893	49,87,649	2,10,856	82,218	1.73	1,99,433	-1,19,711	...	...	1,11,37,112	12,90,798	3,48,777	3.13	4,44,246	-95,674	...	...
1894	49,87,689	2,20,237	89,989	1.79	1,99,503	-1,10,219	...	...	1,12,11,642	13,61,866	3,41,933	3.41	4,45,018	-66,025	...	...
1895	49,90,794	1,93,552	76,462	1.53	1,99,539	-1,21,177	...	...	1,14,18,247	14,04,921	4,08,232	3.61	4,46,104	-41,871	...	...
1896	49,96,305	2,06,078	83,559	1.68	1,99,745	-1,15,886	...	...	1,13,74,056	13,11,885	3,67,395	3.23	4,45,018	-87,623	...	...
1897	49,96,325	1,98,835	58,531	1.17	1,99,791	-1,11,263	...	...	1,11,90,533	12,01,143	2,31,272	2.17	4,46,230	-1,74,953	...	...
1898	49,96,325	2,07,660	77,827	1.56	1,99,853	-1,22,026	...	...	1,14,23,076	11,18,296	2,89,635	2.53	4,46,111	-1,66,776	...	...
1899	49,96,325	2,07,216	82,507	1.65	1,99,853	-1,17,359	...	...	1,15,34,107	11,55,032	2,99,555	2.60	4,49,296	-1,59,741	...	...
1900 { 1st half	*	1,75,380	80,751	...	...	...	...	...	*	7,23,613	2,11,531	...	2,30,290	-18,686	...	...
1900 { 2nd half	*	1,75,380	80,751	...	...	...	...	...	*	7,23,613	2,11,531	...	2,30,290	-18,686	...	...
1901	Annalagated with the Great Indian Peninsula railway.						Annalagated with the Great Indian Peninsula railway.						...			

Calendar year.	KHAMGAON BRANCH.							AMRAOTI BRANCH.						
	TABLE I.				TABLE II.			TABLE I.				TABLE II.		
	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Pro: of exp: to earnings.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Pro: of exp: to earnings.		
	Rs.	Rs.	Rs.		Rs.		Rs.	Rs.	Rs.		Rs.			
1879	5,35,617	38,686	—286	...	146	100:69	4,77,043	69,904	16,175	3:39	224	76:86		
1880	5,19,888	27,363	4,922	0:94	91	84:44	4,45,545	50,865	3,630	0:82	163	92:85		
1881	4,99,271	41,006	4,561	0:92	*	*	4,40,663	53,931	24,124	7:72	•	•		
1882	4,91,164	75,966	30,389	6:19	*	*	4,14,651	85,117	39,535	8:89	•	•		
1883	4,90,996	62,657	22,469	4:58	151	61:14	4,44,860	96,190	44,387	9:38	308	53:84		
1884	4,90,903	46,830	13,037	2:66	113	72:16	4,44,774	76,782	34,174	7:68	246	55:49		
1885	4,90,739	41,363	11,020	2:25	...	...	4,44,730	60,803	34,447	7:75	...	...
1886	4,89,613	59,452	20,233	4:13	...	...	4,44,686	95,111	44,137	9:93	...	...
1887	4,89,180	53,179	16,990	3:47	...	...	4,44,308	88,157	35,855	8:07	...	...
1888	4,88,357	52,635	15,797	3:23	...	...	4,43,892	81,710	30,886	6:96	...	...
1889	4,90,911	65,372	22,528	4:59	...	...	4,45,615	1,02,023	41,671	9:35	...	...
1890	4,90,520	55,248	26,092	5:32	...	...	4,46,155	1,01,502	46,251	10:39	...	...
1891	4,90,408	66,675	32,620	6:65	...	...	4,49,395	1,12,900	53,393	11:88	...	...
1892	4,89,132	65,548	30,909	6:32	...	...	4,50,160	1,05,762	48,637	10:80	...	...
1893	4,87,567	21,697	21,997	4:51	...	...	4,49,998	48,941	43,056	9:57	...	...
1894	4,56,003	21,966	21,667	4:46	...	...	4,49,461	42,795	41,910	9:32	...	...
1895	5,20,947	26,031	26,031	5:00	...	...	4,49,988	39,137	38,253	8:50	...	...
1896	5,22,603	24,446	24,446	4:68	...	...	4,51,119	43,756	42,671	9:50	...	...
1897	5,22,150	13,001	13,001	2:66	...	...	4,52,445	30,743	29,862	6:60	...	...
1898	5,22,150	24,326	24,326	4:66	...	...	4,54,436	40,037	39,172	8:62	...	...
1899	5,22,150	41,850	14,850	2:84	...	...	4,54,417	33,099	32,214	7:09	...	...
1900	5,22,150	33,783	13,924	2:67	...	...	4,54,418	78,532	32,436	7:14	...	...
1901	5,22,150	49,378	23,337	4:47	120	52:74	4,51,915	1,08,378	50,637	11:12	365	48:73		
1902 { 1st half } { 2nd half }	• •	{ 32,968 • }	{ 17,309 • }	• •	120 120	52:35 52:35	• •	{ 79,582 41,099 }	{ 41,099 • }	• •	489 •	53:88 •		
1903	Amalgamated with the Great Indian Peninsula railway.						Amalgamated with the Great Indian Peninsula railway.							

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 5} _{Sub-heads (a) to (i)} GREAT INDIAN PENINSULA RAILWAY SYSTEM—contd.

5 (b) Agra-Delhi Chord railway (5' 6" gauge)—

This railway has been constructed by the State and is worked by the Great Indian Peninsula Railway Company.

Details of construction—

This railway is 125·99 miles long. Its construction was sanctioned in 1898 and it was opened in 1904.

Permanent-way.—The line is laid with 85-lb. bull-headed steel rails on 45-lb. cast iron chairs spiked with 3 spikes to deodar sleepers.

Ballast.—The line is ballasted with kunkur soling and stone ballast to bring it up to full section.

Fencing.—The Kosi-Delhi section is fenced and the Agra-Kosi section is being fenced.

Curves.—The sharpest curve is of 950 feet radius.

Gradients.—The ruling gradient is 1 in 400, except between Raja Ki Mandi Junction and Agra Jail and between Delhi Sadr and Delhi Junction where it is 1 in 200 and 1 in 333, respectively.

Terms of contract—

This railway is being worked under a contract (between the Secretary of State and the Great Indian Peninsula Railway Company) which is under execution and which is to be deemed to have commenced on and from the day on which the Agra-Delhi Chord railway was opened for public traffic.

The general conditions of the contract are as follows :—

Government aid.—The line is the property of the State.

Currency of contract.—The contract may during its subsistence be terminated on the 30th June or 31st December either by the Secretary of State or the Company giving to the other party not less than twelve calendar months' notice in writing.

Terms of working.—The charge for working expenses of the Agra-Delhi Chord railway bears the same proportion to its gross earnings as the entire working expenses of the Great Indian Peninsula railway "undertaking" including the Agra-Delhi chord railway bear to their combined gross earnings. The whole of the net earnings belong to Government.

Rates and fares.—The same as are in force on the Great Indian Peninsula railway undertaking.

Statistics of working—

TABLE I.							TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1904 . . .	1,05,91,000	18,070	9,392	0·09	2,95,164	—2,85,172	43	44·71
1905 . . .	1,22,46,927	8,04,635	4,19,625	3·43	4,20,181	—536	140	47·85
1906 . . .	1,27,90,307	16,46,320	8,15,363	6·37	4,70,283	+ 3,45,080	253	50·47

5 (c) Bhopal-Itarsi railway (5' 6" gauge)—

Details of construction—

This railway is 57·39 miles long. Its construction was sanctioned in 1880 and it was opened in 1884.

Permanent-way.—The line is laid with the Indian Midland railway 80-lb. flat-footed steel rails on Indian Midland railway cast iron pot sleepers.

Ballast.—The line is fully ballasted throughout with broken stone.

Fencing.—The line is fenced throughout.

Curves.—There are no curves with a radius of less than 990 feet.

Gradients.—The ruling gradient is 1 in 200, except on the Ghat section, 11 miles, where it is 1 in 80.

Terms of contracts—

The Bhopal-Itarsi railway is worked under the following :—

Agreement of—16th September 1880 (between the Government of India and Her Highness the Begum of Bhopal) for construction.

2nd December 1890, supplemental to that of 1880, for division of profits.

Contract of—21st December 1900 (between the Secretary of State and the Indian Midland Railway Company) for maintenance and working by the Great Indian Peninsula Railway Company.

The general conditions of the contracts are as follows :—

Government aid.—The British Government have paid for the portion, 13·11 miles, in British territory, and a moiety of the cost of the bridge over the Nerbudda, or in all about 13 lakhs; the Begum of Bhopal has contributed 50 lakhs for the portion of the line in her dominions. All additional capital has to be provided by Government.

Currency of contracts.—The provisions in the principal contract between the Secretary of State and the Railway Company itself with reference to the termination of that contract extend, and are applicable, to the Bhopal-Itarsi railway.

Power of Company to surrender contracts.—Nil.

Terms of working.—The Company receives a sum bearing the same percentage to the gross receipts of the Bhopal-Itarsi railway as the aggregate working expenses of the whole open system of the Company (including the Bhopal-Itarsi railway) bear to the aggregate gross receipts of that system. The balance of the gross receipts are divided in perpetuity between the British Government and the Ruler of Bhopal in proportion to the capital contributed by each party. In the event of the railway being worked at a loss, such loss to be borne in the same proportion.

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 5} _{Sub-heads (a) to (k)} **GREAT INDIAN PENINSULA RAILWAY SYSTEM—contd.**

5 (c) Bhopal-Itarsi railway (5' 6" gauge)—concl'd.

Terms of contracts—concl'd.

Rates and fares.—The same rates and fares as are in force on the Great Indian Peninsula railway.

Statistics of working—

Calendar year.	TABLE I.						TABLE II.							
	BHOPAL-ITARSI (BRITISH SECTION).						BHOPAL-ITARSI (NATIVE STATE SECTION).				British section.		Native State section.	
	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Gain or loss to the State.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	Rs.		Rs.		Rs.	
1880 . . . . .	...	...	...	...	...	...	1,21,846	...	...	...	...	...	...	...
1881 . . . . .	...	...	...	...	...	...	15,78,157	...	...	...	...	...	...	...
1882	12,50,000	14,376	2,701	0.08	50,000	-47,296	34,60,091	14,376	2,701	0.08	70	81.90	...	...
1883	12,50,000	25,573	-9,135	...	50,000	-59,135	38,21,236	25,573	-9,135	...	43	135.72	Includ ed with Britis h section	...
1884	12,50,000	7,664	-1,106	...	50,000	-51,406	15,83,261	28,102	-5,152	...	40	104.13		
1885	12,50,000	27,425	-3,874	...	50,000	-53,874	47,71,375	1,01,583	-14,789	...	...	...	Includ ed with Ponin- sula rail way.	(Great Indian
1886	12,50,000	27,822	-3,240	...	50,000	-53,240	48,26,036	1,47,416	-12,501	...	...	...
1887	12,50,000	48,227	3,450	0.31	50,100	-46,150	48,09,939	1,85,576	14,813	0.31	...	...	...	...
1888	12,50,000	55,117	5,340	0.43	50,000	-44,660	48,01,701	1,86,548	18,072	0.38	...	...	...	...
1889	12,50,000	79,163	-5,422	...	50,000	-55,422	48,40,816	2,67,936	-18,351	...	117	106.85	117	106.85
1890	12,85,077	87,765	-16,572	...	50,351	-66,923	50,00,000	2,07,049	-56,093	...	130	118.88	130	118.88
1891	15,13,568	1,30,884	18,607	3.21	57,713	-9,105	50,00,000	1,60,431	1,73,154	3.46	200	62.50	190	62.50
1892	17,46,208	1,53,099	56,397	3.22	69,131	-12,731	50,00,000	4,47,797	1,65,888	3.32	296	63.16	195	62.96
1893	20,25,053	1,69,162	52,038	2.57	78,429	-26,591	50,00,000	1,21,236	1,30,925	2.62	248	69.17	185	69.17
1894	21,71,496	1,61,638	61,155	2.83	83,509	-22,654	50,00,000	3,80,217	1,11,607	2.89	237	61.98	166	61.97
1895	22,47,963	1,42,658	46,114	2.05	89,323	-43,209	50,00,000	3,18,074	1,02,821	2.06	209	67.68	138	67.64
1896	22,71,877	1,63,688	62,744	2.76	90,107	-27,363	50,00,000	3,61,363	1,38,532	2.77	241	61.75	157	61.63
1897	22,97,134	1,52,215	61,135	2.66	91,805	-30,670	50,00,000	3,31,379	1,33,006	2.66	223	59.84	144	59.84
1898	23,21,365	1,93,364	79,435	3.42	92,477	-13,042	50,00,000	4,17,010	1,71,375	3.13	284	58.81	181	58.90
1899	23,61,938	2,09,611	84,080	3.56	93,363	-9,224	50,00,000	4,47,225	1,79,444	3.59	307	59.89	194	59.88
1900	23,67,389	2,55,120	1,27,332	5.33	95,293	+32,039	50,00,000	5,35,369	2,67,288	5.35	375	56.12	234	50.06
1901	25,46,891	2,92,861	1,44,235	5.66	98,989	+45,246	50,00,000	5,85,152	2,98,838	5.77	430	50.75	251	50.64
1902	28,02,390	3,46,103	1,71,236	6.11	1,06,632	+64,604	50,00,000	6,37,038	3,16,683	6.33	508	51.51	278	49.74
1903	30,92,697	3,77,177	1,91,443	6.19	1,17,285	+74,118	50,00,000	6,31,911	3,21,328	6.48	553	49.48	276	48.81
1904	31,52,907	3,95,784	1,98,066	6.28	1,20,127	+77,939	50,00,000	6,43,742	3,22,374	6.45	583	50.14	279	49.81
1905	31,76,930	3,25,637	1,67,305	5.27	1,23,241	+44,064	50,00,000	5,21,619	2,67,959	5.36	477	48.57	227	48.63
1906	32,57,271	3,61,617	1,78,761	5.49	1,25,079	+43,682	50,00,000	5,65,510	2,81,376	5.63	521	50.57	246	50.25

5 (d) Bhopal-Ujjain railway (5' 6" gauge)—

Details of construction—

This railway is 113.27 miles long. Its construction was sanctioned in 1892 and it was opened in 1895.

Permanent-way.—The permanent-way consists of 75-lb. flat-footed steel rails on transverse steel sleepers.*Ballast.*—The line is fully ballasted throughout with broken stone.*Fencing.*—The line is fenced only at, and in the vicinity of, stations, towns and important level crossings.*Curves.*—There are no curves with a radius of less than 990 feet.*Gradients.*—The ruling gradient is 1 in 150.

Terms of contracts—

The railway is worked under the following:—

Agreement of—4th August 1896 (between the Government of Her Highness the Begum of Bhopal and the Indian Midland Railway Company) for working the Bhopal-Parbati section.

4th August 1896 (between the Government of His Highness the Maharaja Scindia of Gwalior and the Indian Midland Railway Company) for working the Parbati-Ujjain section.

Contract of—21st December 1900 (between the Secretary of State and the Indian Midland Railway Company) for working by the Great Indian Peninsula Railway Company.

The general conditions are as follows:—

Government aid.—Nil. The Bhopal-Parbati section is owned by the Bhopal Durbar and the Parbati-Ujjain section, by the Gwalior Durbar.*Currency of agreements.*—The agreements are terminable on the expiry of ten years from the dates of the opening of the sections or on the 30th June or 31st December in any year thereafter, on twelve months' notice in writing being given by either party.*Terms of working.*—For the Bhopal-Parbati section the Company retains out of the gross receipts a sum bearing the same proportion to the whole of the working expenses attributed to the Indian Midland railway system including branches as the gross receipts of the section bear to the whole gross receipts of that system including branches.

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 5} Sub-heads (a) to (h). GREAT INDIAN PENINSULA RAILWAY SYSTEM—contd.

5 (d) Bhopal-Ujjain railway (5' 6" gauge)—concl'd.

Terms of contracts—concl'd.

For the Parbati-Ujjain section the Company retains 50 per cent. of the gross receipts of the section of each half-year; and receives rent for works, &c., in sole and joint use at Ujjain Junction and rent for the telegraph lines and instruments when not the property of the railway.

Rates and fares.—The same rates and fares as are in force from time to time on the Great Indian Peninsula railway.

Statistics of working—

TABLE I.					TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	
1892	88,462	...	...	...	...	...
1893	22,76,863	...	...	...	...	...
1894	53,53,849	...	...	...	...	...
1895	69,69,331	1,958	979	0.01	...	50.00
1896	77,77,604	3,69,114	1,80,218	2.32	63	51.17
1897	75,36,180	3,72,337	1,84,660	2.45	63	50.40
1898	75,85,789	4,16,940	2,05,051	2.70	71	50.82
1899	76,54,290	5,82,344	2,77,911	3.63	99	52.28
1900	76,85,020	9,16,349	4,65,681	6.06	161	50.79
1901	77,61,569	5,45,956	2,62,014	3.38	93	52.00
1902	78,02,855	5,62,063	2,77,292	3.75	99	52.36
1903	78,11,462	4,44,766	2,14,841	2.86	78	49.85
1904	78,14,670	4,54,721	2,17,562	2.91	77	49.99
1905	78,35,712	6,08,240	2,96,639	3.91	103	51.23
1906	78,51,048	6,86,799	3,31,924	4.23	117	51.67

5 (e) Bina-Goonna-Baran railway (5' 6" gauge)—

Details of construction—

This railway is 145.63 miles long. Its construction was sanctioned in 1892 and it was opened in 1899.

Permanent-way.—The line is laid with 75-lb. flat-footed steel rails on deodar sleepers.

Ballast.—The line is ballasted with broken stone and laterite.

Fencing.—The line from Bina to Goona is fenced. The Goona-Baran section is unfenced except at stations.

Curves.—There are no curves with a radius of less than 990 feet.

Gradients.—The ruling gradient is 1 in 125.

Terms of contracts—

The railway is worked under the following:—

Agreements of—15th July 1896 (between the Government of His Highness the Maharajah Scindia of Gwalior and the Indian Midland Railway Company) for working the Bina-Goonna section.

12th May 1899 (between the Government of His Highness the Maharajah Scindia of Gwalior and the Indian Midland Railway Company) for working the Goona-Dharnaoda section.

27th February 1899 (between the Government of His Highness the Nawab of Tonk and the Indian Midland Railway Company) for working the Dharnaoda-Chabra section.

20th February 1899 (between the Government of His Highness the Maharao of Kotah and the Indian Midland Railway Company) for working the Chabra-Baran section.

Contract of—21st December 1900 (between the Secretary of State and the Indian Midland Railway Company) for working by the Great Indian Peninsula Railway Company.

Agreement of—16th March 1905 (between the Tonk and Gwalior Durbars) for purchase by the latter of the Dharnaoda-Chabra section.

The general conditions are as follows:—

Government aid—Nil. The Bina-Goonna, Goona-Dharnaoda and Dharnaoda-Chabra sections are owned by the Gwalior Durbar, and the Chabra-Baran section by the Kotah Durbar.

Currency of agreements.—The agreements are terminable on the expiry of ten years from the dates of the opening of the sections, or on the 30th June or 31st December in any year thereafter, on twelve months' notice in writing being given by either party.

Terms of working.—For the Bina Goona section the Company retains 50 per cent. of the gross receipts of the section of each half-year; and receives rent for works, etc., in sole and joint use at Bina junction, and rent for telegraph lines and instruments when not the property of the railway.

For the Goona-Dharnaoda, Dharnaoda-Chabra and Chabra-Baran sections the Company retains out of the gross receipts a sum (which includes any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work', subject to a maximum charge on such account of Rs. 20 per mile open in each half-year) bearing the same proportion to the whole of the working expenses attributed to the Indian Midland railway system as the gross receipts of each section bear to the whole gross receipts of that system. This sum not to exceed 50 per cent. of the gross receipts in the case of the Goona-Dharnaoda section.

Rates and fares.—The same rates and fares as are in force from time to time on the Great Indian Peninsula railway.

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 112.]

Number ^{Main head 5} ^{Sub-heads (a) to (h)} **GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.***

5 (e) Bina-Goonn-Baran railway (5' 6" gauge)—*contd.*

Statistics of working—

TABLE I.					TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	
1891	51,905	...	...	...	...	...
1892	2,57,611	...	...	...	...	...
1893	35,18,701	...	...	...	...	...
1894	47,79,618	...	...	...	...	...
1895	49,81,035	48,701	22,193	...	19	54.42
1896	51,16,074	91,140	36,821	0.68	24	59.60
1897	87,73,621	1,02,386	43,446	0.50	27	57.57
1898	97,66,063	1,30,004	58,040	0.59	35	55.36
1899	99,31,680	2,67,359	1,26,108	1.27	48	52.83
1900	1,00,21,005	4,31,817	2,20,490	2.20	57	49.20
1901	1,00,43,236	2,52,716	1,22,070	1.22	33	51.34
1902	99,14,412	2,38,825	1,19,792	1.21	32	52.71
1903	99,62,459	3,21,585	1,55,600	1.63	42	49.49
1904	99,87,016	3,91,886	1,92,897	1.98	52	49.54
1905	99,90,394	3,68,669	1,81,269	1.88	49	50.83
1906	99,94,053	4,91,611	2,40,881	2.41	65	50.90

5 (f) Indian Midland railway (5' 6" gauge)—

Chairman.—Rt. Hon'ble Sir Andrew R. Scoble, K.C.S.I.

Secretary.—R. H. Walpole, Esq.

Offices.—48, Copthall Avenue, London, E.C.

Details of construction—

The open mileage of the Indian Midland railway is 809.85 miles, which may be divided into main line (Bhopal to Agra Road), 318.59 miles, and branches, 491.26 miles.

Sanction was first given to the construction of this line in 1876 and the main line was opened throughout in 1889.

Permanent-way.—The whole of the main line, the Manikpur branch, the Cawnpore branch from Jhansi to mile 326.64, and from Bina to Katni, are laid with 80-lb. flat-footed steel rails on cast iron pot sleepers. The Cawnpore branch from mile 331.64 to Hamirpur Road is laid with East Indian railway 75-lb. double-headed steel rails on Denham Olpherts' sleepers. The East Indian railway type rails and Denham Olpherts' sleepers are being gradually renewed with Indian Midland railway 80-lb. flat-footed steel rails and cast iron oval pots.

Ballast.—The line is ballasted with gravel, laterite, kunkur or stone.

Fencing.—The main line is fenced throughout and the branches are partially fenced.

Curves.—There are no curves with a radius of less than 990 feet.

Gradients.—The ruling gradient between Bhopal and Jhansi is 1 in 200; between Jhansi and Agra 1 in 150 and between Jhansi and Manikpur 1 in 125. The Jhansi-Cawnpore branch is practically level, except at bridge approaches where the gradients are 1 in 250 and 1 in 300, and between Jhansi and Garhmanu where it is 1 in 200.

Terms of contracts—

The railway is worked under the following contracts:—

Contracts of—2nd October 1885—Indian Midland Railway Company's principal contract.

18th March 1890—Contract for the acquisition of the Scindia railway.

18th June 1896—Contract for the Saugor-Katni railway.

21st December 1900—Contract for the transfer of the working of the Indian Midland railway to the Great Indian Peninsula Railway Company.

Government aid.—Interest at 4 per cent. per annum in sterling is guaranteed on £3,000,000 share capital. On further capital that may be required the guarantee to be 4 per cent. or such other rate as may be agreed upon. A considerable amount of capital has been advanced by Government for the existing system; and, in the case of the Saugor-Katni extension, it has been agreed that all money required for expenditure in India shall be supplied by the Government, the Company raising only the amount required for expenditure in England. Land was provided free.

Currency of contracts.—(1) *Indian Midland railway contract.*—The contract of 1885 may be determined by Government giving 12 months' previous notice on the 31st December 1910, or on the 31st December of any succeeding tenth year. Government may also terminate the contract at any time, on six months' notice, if the Company fails to fulfil its obligations, or if the line be worked at a loss for not less than three consecutive half-years. On the termination of the contract the Company is to hand over to Government the railway and all its belongings of every description, and Government are to repay the amount at par of the share capital which has been paid by the Company. The contract of 1900 is current for a period of 25 years from the 1st July 1900; but the Indian Midland Railway Company's right to a 4 per cent. guarantee on share capital and one-fourth share of surplus profits remains in full force till the termination of either the contract of 1885 or that of 1900.

(2) *Scindia and Saugor-Katni railways contracts.*—The contracts of 1890 and 1896 run concurrently with that of 1885, to which they are supplemental.

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 5} Sub-heads (a) to (h). GREAT INDIAN PENINSULA RAILWAY SYSTEM—contd.

5 (f) Indian Midland railway (5' 6" gauge)—contd.

Terms of contracts—contd.

Power of Company to surrender contract.—Nil.

Terms of working.—From the gross earnings for any calendar year will be deducted working expenses, and the net earnings applied towards payment to Government of interest on advances of capital made by it to the Company and for repayment of the interest paid by it to the Company for that year, the balance to be divided in proportion of three-fourths to Government and one-fourth to the Company.

Rates and fares.—Certain maxima and minima have been fixed within which the Company is permitted to vary its rates.

Statistics of working—

Calendar year.	TABLE I.							TABLE II.			
	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Company's share of net earnings.*	Gain or loss to the State.	SCINDIA.		INDIAN MIDLAND.	
	Rs.	Rs.	Rs.	...	Rs.	Rs.	Rs.*	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.
1878								54	133.30	...	...
1879	73,22,551	90,916	—33,772	...	3,06,178	...	—3,39,950	39	134.95	...	...
1880	81,63,253	2,01,823	20,129	0.25	3,57,620	...	—3,37,491	58	88.05	...	...
1881	38,16,063	3,01,681	78,343	0.91	3,48,809	...	—2,70,467	81	77.85	...	...
1882	87,63,714	3,29,289	92,231	1.06	3,47,303	...	—2,55,072	85	71.99	...	...
1883	92,92,537	3,38,511	1,59,716	1.72	3,56,750	...	—1,97,034	87	53.82	...	...
1884	1,18,68,111	3,68,326	1,72,603	1.45	3,74,122	...	—2,01,519	95	53.14	...	...
1885	1,60,14,107	3,94,081	1,99,680	1.24	6,48,112	...	—4,48,432	101	49.33	...	...
1886	2,48,06,298	3,91,832	2,14,526	0.86	18,69,268	...	—16,51,742	101	49.69	56	82.03
1887	5,10,96,457	6,32,204	2,78,943	0.54	20,00,184	...	—17,22,141	117	46.62	81	80.63
1888	6,96,63,213	10,27,638	3,74,204	0.54	28,55,488	...	—24,81,284	95	47.74	99	72.53
1889	7,81,45,085	30,69,255	6,83,111	0.81	31,24,456	...	—24,91,345	...	...	92	77.32
1890	8,32,79,427	31,24,365	5,99,780	0.72	33,94,157	...	—27,94,377	...	...	86	80.80
1891	8,52,46,148	41,62,361	13,52,172	1.59	33,12,200	...	—19,60,028	...	...	115	67.51
1892	8,65,79,006	44,77,625	17,26,260	1.99	37,23,985	...	—19,97,725	...	...	124	61.45
1893	8,71,62,843	44,59,053	17,00,409	1.95	41,40,194	...	—24,39,785	...	...	123	61.87
1894	8,78,06,437	52,22,033	22,02,394	2.51	42,59,815	...	—20,57,481	...	...	144	57.83
1895	8,81,40,985	44,91,707	16,48,360	1.87	45,97,495	...	—29,49,135	...	...	124	63.30
1896	9,25,53,886	48,51,951	20,17,920	2.18	44,23,983	...	—24,06,154	...	...	134	59.41
1897	9,77,94,421	54,89,540	24,06,565	2.46	42,53,893	...	—18,47,328	...	...	150	56.18
1898	9,96,74,805	56,25,823	25,11,911	2.52	39,99,966	...	—14,88,075	...	...	147	55.35
1899	10,16,34,077	64,77,226	27,82,950	2.71	39,75,411	...	—11,92,461	...	...	152	57.08
1900	10,31,35,002	90,60,560	48,72,287	4.72	40,03,595	...	+ 8,08,692	...	...	213	46.23
1901	10,58,27,061	82,43,068	42,50,587	4.02	38,63,725	1,89,164	+ 1,98,698	...	...	199	48.43
1902	10,62,11,714	90,49,628	44,86,267	4.22	41,04,505	7,390	+ 3,74,482	...	...	209	50.43
1903	10,98,96,302	80,86,118	40,92,942	3.73	41,85,502	2,062	— 94,622	...	...	180	49.35
1904	11,22,35,779	82,90,712	41,48,862	3.70	42,59,767	...	— 1,10,905	...	...	183	49.96
1905	11,31,43,178	79,91,323	40,81,528	3.61	42,77,173	...	— 1,92,645	...	...	178	48.89
1906	11,41,69,155	98,69,294	49,19,560	4.31	42,96,288	...	+ 6,28,277	...	...	234	50.15

5 (g) Gwalior Light railway (2' 0" gauge)—

Details of construction—

The open mileage of this railway is 183.53 miles, and may be divided into the following sections:—(1) Gwalior to Sipri, 78.81 miles, (2) Gwalior to Bhind, 52.33 miles, and (3) Gwalior to Sabalgarh, 57.39 miles. The several sections were opened in 1899 and 1904, respectively.

Besides the above there are 66.39 miles under construction.

Permanent-way.—The permanent-way consists of 30-lb. flat-footed steel rails, laid on sal and steel trough sleepers.

Ballast.—The line is fully ballasted throughout with broken stone, sand and moorum.

Fencing.—The line is fenced between Gwalior and Morar only.

Curves.—The sharpest curve in station yards has a radius of 200 feet. The sharpest curve out of stations has a radius of 955 feet.

Gradients.—The ruling gradient is 1 in 60.

Terms of contract—

The railway is worked under the following agreement:—

Agreement of—11th October 1900 (between the Government of His Highness the Maharaja Scindia of Gwalior and the Indian Midland Railway Company) for working.

The general conditions of the agreement are as follows:—

Government aid.—Nil. The Gwalior Light railway is the property of the Gwalior Durbar.

Currency of contract.—Either party may determine the agreement by giving three months' notice.

* Based on actual receipts and payments during the year.

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 5} _{Sub-heads (a) to (h)}. **GREAT INDIAN PENINSULA RAILWAY SYSTEM—concl'd.**(5) (g) **Gwalior Light railway (2' 0" gauge)—concl'd.****Terms of contract—concl'd.**

Terms of working.—The gross receipts are collected and treated as receipts of the Indian Midland Railway Company and from them are deducted the actual expenditure in the Traffic and Audit departments for station and train staff, audit clerks, on printing and stationery and stores consumed, and all other expenses connected therewith, and 5 per cent. per annum for construction and maintenance of accommodation required for the exclusive use of the light railway; 7½ per cent. for ballast, permanent-way, etc.,* including maintenance and renewal, plus 15 per cent. to cover supervision and general charges other than those rendered in the accounts. The balance is paid over to the Gwalior Durbar.

Rates and fares.—Rates and fares are the same as those in force on the Great Indian Peninsula railway.

Statistics of working—

Calendar year.	TABLE I.				TABLE II.	
	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1896	2,166	...	...	...	...	...
1897	1,03,554	...	...	...	...	...
1898	9,30,815	...	...	...	...	...
1899	22,79,267	4,094	—4,113	...	6	258.33
1900	27,10,557	84,617	—137	...	13	100.16
1901	31,07,277	82,227	—520	...	13	100.63
1902	39,77,104	1,09,577	9,346	0.33	17	91.47
1903	41,76,353	1,66,002	68,226	1.63	25	58.90
1904	46,67,923	1,83,284	52,501	1.13	22	71.36
1905	54,72,847	1,89,735	52,745	0.96	20	72.20
1906	57,87,428	2,58,223	1,12,211	1.94	27	56.54

5 (A) Matheran Light railway (2' 0" gauge)—**Details of construction—**

The line, from Neral station on the Great Indian Peninsula railway to the hill station of Matheran, will be 12.61 miles long.

Its construction by Mr. Abdul Husein Adamjee Peerbhoy of Bombay has been authorized by an order contained in the Bombay Government, Public Works Department (Railway), Notification No. 34, dated the 28th July 1904. On completion the line will be worked by the Great Indian Peninsula Railway Company.

Terms of contract—

This railway will be maintained and worked under—

Terms—Contained in the order accompanying Bombay Government Notification No. 34, dated the 28th July 1904.

The general conditions are as follows:—

Government aid.—Free provision of Government land.

Currency of agreement.—Government may purchase the undertaking as a going concern from the promoter on 1st January 1910, or at the expiration of any subsequent period of 5 years, at 25 times the average net earnings of the undertaking for the 3 calendar years immediately preceding the date of purchase.

Terms of working.—Not yet settled.

Rates and fares.—Certain maxima have been fixed.

Number ^{Main head 6} _{Sub-heads (a) to (i)}. **MADRAS RAILWAY SYSTEM—**

Chairman.—Lieutenant-Colonel R. Gardiner, R.E.

Secretary.—W. H. Cole, Esq., M.I.C.E.,

Offices.—1, Broad Street Place, Finsbury Circus, London, E. C.

Lines comprising the system.—The Madras railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(a) Madras railway	904.01	1.00	905.01
(b) Azhikal-Mangalore extension	56.35	20.91	77.26
(c) Kolar Gold-fields railway	9.88	...	9.88
(d) Madras (North-East line) (Southern section of the East Coast (State) railway)	497.19	0.85	498.04
(e) Nilgiri railway	16.99	11.75	28.74
(f) Shoranur-Cochin railway	64.75	...	64.75
(g) Morappur-Dharmapuri railway	18.53	...	18.53
(h) Tirupattur-Krishnagiri railway	25.38	...	25.38
(i) Salem-Attur railway . . . . .	...	36.06	36.06
Total	1,593.08	70.57	1,663.65

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 6}
^{Sub-heads (a) to (i)} . **MADRAS RAILWAY SYSTEM—contd.**

Running powers—*Foreign lines over Home line—*

		Miles.
Bengal-Nagpur railway, Waltair to Vizagapatam (including Wharf and Swamp lines)	} for passenger and goods trains.	4.97
Southern Mahratta railway, Tadepalli to Bezvada		2.97
Nizam's Guaranteed State railway, distant signal at Bezvada to Bezvada station		0.89
Total		8.83

6 (a) Madras railway proper (5' 6" gauge)—**Details of construction—**

The open mileage of the Madras railway proper amounts to 904.01 miles. This may be divided into (1) the *South-West line*, main line (Madras to Azhikal), 473.73 miles; branches, 123 miles; and (2) the *North-West line* (Arkonam to Raichur), 308.28 miles. Of the above 43.13 miles are double line.

There was, in addition, 1 mile under construction.

Sanction was first given to the construction of the South-West line in 1853 and it was opened through to Calicut in 1883. The North-West line was sanctioned in 1859 and was opened through to Raichur in 1871.

Permanent-way.—The present type of permanent-way for the main line is 80-lb. bull-headed steel rails, laid on cast iron pots, each weighing 112 lbs. The section, Calicut to Azhikal, is laid with 60-lb. flat-footed steel rails on wooden sleepers.

Ballast.—The line is ballasted with stone and sand, chiefly the former.

Fencing.—The line is fenced throughout.

Curves.—The sharpest curve is of 700 feet radius.

Gradients.—The ruling gradient between Madras and Mallapuram is 1 in 200; between Mallapuram and Calicut, 1 in 100 (except at Mallapuram Ghat where it is 1 in 70 and at Walayar Ghat where it is 1 in 62); between Calicut and Cannanore, 1 in 150; between Jalarpet and Bangalore, 1 in 100 (except at Kuppam Ghat where it is 1 in 66); between Podanur and Mettupalaiyam, 1 in 80; between Olavakkot and Palghat, 1 in 106; between Walajah Road and Ranipet, 1 in 150; and between Arkonam and Raichur, 1 in 80 (except at Ballapalli Ghat where it is 1 in 66).

Terms of contracts—

The Madras railway is worked under the following contracts:—

Contracts of—22nd December 1852 (South-West line).

19th December 1855 (South-West line).

13th August 1858 (North-West line).

2nd January 1871 (Amalgamation).

18th January 1901 (Calicut-Azhikal extension).

1st November 1901 (Walajah Road (Arcot)-Ranipet branch).

The general conditions of the contracts are as follows:—

Government aid.—Guarantee of interest in sterling at 5 per cent. for term of contract. On some portion of the share capital and on debentures lower rates of interest are guaranteed. Land was provided free of cost.

Currency of contracts.—In ninety-nine years from 1st April 1857 the line reverts to Government on paying for the rolling-stock at its fair value, provided the Company does not previously give notice of its intention to surrender the contract. Government may, within six months after the expiration of 25 or 50 years of the term, determine the contract by purchase at the mean market value of the shares during the three preceding years. Possession to be taken of the railway at the half-yearly day next but one following the notice. Government may also determine the contract at any time, on giving three months' notice, if the Company fails to observe its obligations, Government repaying the capital expended.

NOTE.—Government relinquished their right to determine the contract at the end of the 25th year, and the only remaining opportunity of giving notice of purchase will be in 1907 within six months after 1st April.

Power of Company to surrender contract.—The Company may, at any time, surrender on six months' notice, receiving back (either in cash or by annuity at the option of the Government) the capital expended.

Terms of working.—As to the lines covered by the contract of 2nd January 1871, after deducting the working expenses (which include any single item of capital expenditure not exceeding Rs. 1,000 classed as a "Minor Work", subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year), the surplus profits, after repayment of the guaranteed interest of each half-year converted at the rate of exchange of 1s. 10d. per rupee, are divided equally between Government and the Company. As to the Calicut-Azhikal railway working expenses are calculated at the average rate prevailing in each half-year over the entire system, and if the net earnings in any half-year exceed the interest charges converted at the prescribed rate of exchange, one-fifth belongs to the Company; but any deficiency in one half-year is a first charge on the net receipts of that and the next succeeding half-year of every line of railway for the time being belonging to the Company. Subject to the provisions in the contract of 18th January 1901 the covenants and provisions of the several principal indentures apply to the Calicut-Azhikal railway.

Rates and fares.—Under the contract Government fixed maxima rates and fares, which cannot be altered by Government until the net receipts exceed 10 per cent. on the capital outlay. The fixed maxima rates cannot be altered by the Company without Government sanction. Authority, however, has been given to the Company, by an executive order, to vary its rates within the prescribed maxima without reference to Government.

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 6} Sub-heads (a) to (c). **MADRAS RAILWAY SYSTEM—contd.****6 (a) Madras railway proper (5' 6" gauge)—concl'd.**

Statistics of working—

Calendar year	TABLE I.							TABLE II.		
	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Guaranteed interest (at current rates of exchange).	Company's share of net earnings.	Gain or loss to the State.	Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.		Rs.	
1879	11,15,68,493	66,26,186	29,75,170	1.81	57,04,205	..	-36,29,035	1856	75	51.66
1880	11,39,78,220	61,62,146	19,57,137	1.73	57,16,332	..	-37,59,195	1857	91	47.13
1881	11,40,07,803	63,11,312	20,75,856	1.82	57,16,365	..	-36,40,509	1858	93	55.53
1882	11,39,69,608	69,18,571	25,70,841	2.25	56,89,011	..	-31,18,170	1859	122	60.38
1883	11,39,92,074	66,31,909	25,26,549	2.22	57,08,416	..	-31,81,867	1860	117	78.60
1884	11,12,51,164	71,41,315	20,35,687	2.57	61,23,432	..	-34,87,745	1861	91	71.08
1885	11,50,34,160	76,57,993	32,79,168	2.85	67,36,206	..	-34,57,038	1862	84	74.02
1886	11,59,81,297	79,66,997	32,49,213	2.78	71,24,952	..	-38,95,709	1863	110	68.57
1887	11,40,70,190	81,72,135	28,80,029	2.52	73,20,207	..	-44,40,178	1864	133	49.62
1888	11,53,78,656	85,91,054	35,21,615	3.05	76,23,551	..	-41,02,236	1865	145	45.69
1889	11,63,84,000	91,10,894	37,38,421	3.21	76,69,934	..	-39,31,513	1866	147	45.62
1890	11,79,84,234	95,06,134	45,21,480	2.83	68,85,958	..	-23,64,478	1867	153	43.47
1891	11,89,52,009	93,14,688	39,06,529	3.28	73,92,186	..	-34,85,657	1868	181	41.48
1892	11,97,71,835	96,24,670	12,92,133	3.38	83,62,369	..	-40,70,236	1869	171	49.16
1893	12,03,89,489	1,05,05,036	54,21,742	4.50	94,89,732	..	-30,60,990	1870	146	52.84
1894	12,05,25,315	1,03,21,012	49,47,863	4.10	96,56,469	..	-47,08,606	1871	139	51.27
1895	12,08,91,797	1,12,08,407	58,10,310	4.80	96,17,135	53,195	-38,60,320	1872	143	52.19
1896	12,11,52,091	1,08,80,251	53,85,291	4.44	89,92,681	..	-36,07,393	1873	157	56.94
1897	12,15,01,808	1,14,65,314	59,52,565	4.92	84,81,597	91,135	-25,90,167	1874	132	64.67
1898	12,22,69,990	1,07,20,483	54,72,657	4.43	82,40,191	90,516	-29,18,080	1875	144	70.28
1899	12,34,93,025	1,05,45,192	50,16,254	4.06	80,58,144	..	-30,41,890	1876	159	64.38
1900	12,62,82,369	1,13,29,223	53,70,820	4.25	81,24,701	..	-27,53,881	1877	225	59.26
1901	13,13,51,379	1,14,86,803	57,55,603	4.40	83,15,733	..	-25,30,130	1878	148	76.05
1902	13,50,23,683	1,18,41,074	57,91,420	4.29	84,41,464	..	-26,50,044	1879	148	68.68
1903	13,61,08,517	1,26,21,022	55,67,564	4.08	84,39,831	..	-28,71,967	1880	188	63.24
1904	13,71,10,600	1,37,65,064	62,73,135	4.57	86,30,058	..	-23,56,923	1881	141	67.11
1905	13,85,08,336	1,49,16,956	58,69,047	4.24	87,03,239	..	-28,31,192	1882	155	62.84
1906	14,03,39,676	1,50,91,141	61,78,289	4.40	87,71,265	1,25,000	-27,17,976	1883	148	61.90
								1884	160	58.89
								1885	171	57.18
								1886	178	59.46
								1887	189	64.76
								1888	195	58.72
								1889	209	58.97
								1890	218	52.44
								1891	214	58.20
								1892	221	55.40
								1893	241	48.39
								1894	237	52.06
								1895	257	47.55
								1896	249	50.10
								1897	263	47.65
								1898	246	49.51
								1899	240	52.43
								1900	254	51.75
								1901	253	49.63
								1902	256	50.25
								1903	261	55.88
								1904	298	54.43
								1905	296	57.88
								1906	321	59.05

6 (b) Azhikal-Mangalore extension (5' 6" gauge)—

Details of construction—

The open mileage (Azhikal to Kumbha) is 50.35 miles. It was sanctioned in 1901 and was opened in 1906. There are 20.91 miles (Kumbha to Mangalore) still under construction.

Permanent-way.—The permanent-way consists of 75-lb flat-footed steel rails laid on pyinkado, sal and jarrah sleepers.

Ballast.—The line is ballasted with laterite broken to 2" gauge in cuttings and sand with laterite covering in banks.

Fencing.—The line is fenced throughout.

Curves.—The sharpest curve is of 2,865 feet radius.

Gradients.—The ruling gradient is 1 in 90.

Terms of contract—

The line is worked under the following contract:—

Contract of.—30th December 1903 (between the Secretary of State and the Madras Railway Company) for construction, maintenance and working—supplemental to the contract of 31st December 1902, for working a portion of the late East Coast (State) railway.

The general conditions of the contract are as follows:—

Government aid.—The line is the property of the State.

Currency of contract.—The contract is to continue in force till the 31st December 1907.

Terms of working.—The working expenses are to include per half-year any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 6 **MADRAS RAILWAY SYSTEM—contd.**
Sub-heads (a) to (i)

6 (b) Azhikal-Mangalore extension (5' 6" gauge)—contd.**Terms of contract—contd.**

in each half-year; a sum not exceeding Rs. 40 for every mile of line open to traffic for Government supervision and control; and the following:—

The actual expenditure incurred under the account heads of "Maintenance and renewal of permanent-way," "Repairs of bridges, etc., wages and materials," "Conservancy of rivers," and "Repairs of staff quarters,"

and the share of general working expenses of the system under the remaining heads of account in proportion to the gross earnings of the state railway.

The balance of the gross earnings to belong to Government.

Rates and fares.—Government exercise full control over rates and fares.

Statistics of working—

TABLE I.							TABLE II.	
Calendar year.	Capital outlay to end of the year.	Gross earnings.	Net earnings.	Per cent. on Capital outlay.	Interest.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1906	1,20,19,658	30,310	14,990	0.12	4,17,122	—4,02,132	93	50.54

6 (c) Kolar Gold-fields railway (5' 6" gauge)—

The railway was constructed by the Mysore State in order to provide facilities for the gold-fields.

Details of construction—

The railway is 9.88 miles long and connects Bowringpet with Marikuppam. Its construction was sanctioned in 1892 and it was opened in 1894.

Permanent-way.—The line is laid with 76-lb. bull-headed steel rails on cast iron pot sleepers.

Ballast.—The line is ballasted with stone and sand, chiefly the former.

Fencing.—The line is fenced throughout.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 66.

Terms of contract—

The railway is worked under the following agreement:—

Agreement of—1st July 1902 (between the Mysore Government and the Madras Railway Company) for working and maintenance with effect from 1st January 1901.

The general conditions of the agreement are as follows:—

Government aid.—The line is the property of the Mysore State.

Currency of agreement.—The agreement to remain in force subject to six months' notice from either side on the 30th of June or the 31st of December of any year.

Terms of working.—The Company to charge for working and maintenance the same proportion of gross earnings which the working expenses of the whole system, including this line, bear to the gross earnings of that system, and 5 per cent. of the gross earnings of the railway for rolling-stock.

Rates and fares.—Subject to certain special rates and fares, the same rates, etc., as are in force from time to time on the Madras railway.

Statistics of working—

TABLE I.					TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1892	27,661	...	...	...	...	...
1893	5,27,634	...	...	...	...	...
1894	6,56,175	75,771	29,273	4.46	240	61.67
1895	6,61,654	1,52,953	66,379	10.03	294	56.60
1896	7,45,004	1,55,817	63,287	8.50	299	59.25
1897	7,91,074	2,08,854	90,378	11.41	402	56.77
1898	8,09,537	2,04,002	82,133	10.15	392	59.33
1899	10,79,552	1,77,687	56,827	5.27	343	59.01
1900	10,77,901	2,08,892	67,093	6.22	402	67.88
1901	11,20,330	2,17,661	91,877	8.20	421	57.79
1902	11,38,480	2,16,829	84,864	7.45	423	60.83
1903	11,02,504	2,07,257	75,237	6.47	403	67.70
1904	11,73,128	2,44,744	99,330	7.61	476	68.54
1905	11,67,864	1,88,402	67,600	5.69	367	64.12
1906	11,96,520	2,00,400	68,275	5.71	690	65.93

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 6} _{Sub-heads (a) to (i)} **MADRAS RAILWAY SYSTEM—contd.**

6 (d) Madras (North-East line) railway (5' 6" gauge)—**Details of construction—**

The North-East line, which is the southern portion of the old East Coast State railway, is 497·19 miles long. It consists of 485·26 miles of main line (Washermenpet to Waltair) and 11·93 miles of branches.

Its construction was sanctioned in 1890 and it was opened throughout in 1900.

The line from Korukkupettai to Basin Bridge Junction, 0·85 mile was under construction.

Permanent-way.—The permanent-way consists of 75-lb. flat-footed steel rails laid on wooden and pea-pod steel sleepers. The wooden sleepers are gradually being renewed by cast iron pot sleepers.

Ballast.—The line is ballasted with stone and sand, chiefly the former.

Fencing.—The line is fenced only in the vicinity of towns, stations and level crossings.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient between Madras and Kistna canal is 1 in 200, and between Kistna canal and Waltair 1 in 150.

Terms of contract—

The line is worked under the following contract:—

Contract of—31st December 1902 (between the Secretary of State and the Madras Railway Company) for maintenance, management and working.

The general conditions of the contract are as follows:—

Currency of contract.—The contract is to continue in force till the 31st December 1907. If the original contract with the Company, dated the 2nd January 1871, is for any reason terminated under the provisions thereof prior to the expiry of the term of this contract, the latter also will, *ipso facto*, terminate at the same time. The contract may also be terminated after twelve months' notice on the 1st April of any year subsequent to 1904.

If the contract is determined by notice at any time previous to the 1st April 1907, and if the ratio of the working expenses to the gross earnings of the Company shall have been raised, by reason of the Company having worked the State railway under this contract, so that the total working expenses of the Company's system from the 1st January 1901 to the termination of the contract shall exceed 50 per cent. of the total gross earnings of the Company's system during such period, the Company will be entitled to suitable compensation for such increase.

Terms of working.—The working expenses of the State railway are to include per half-year any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year; a sum not exceeding Rs. 40 for every mile of line open to traffic for Government supervision and control; and the following:—

the actual expenditure incurred under the account heads of "Maintenance and renewal of permanent-way,"

"Repairs of bridges, etc., wages and materials," "Conservancy of rivers," and "Repairs of staff quarters,"

the share of the general working expenses of the system under the remaining heads of account in proportion to the gross earnings of the State railway;

the allowances and interest payable under the contract for the use by the State railway of the Company's terminal station at Madras;

and the expenditure incurred by the Company in replacing or repairing the State railway locomotive engines and tenders;

The balance of the gross earnings to belong to Government.

Rates and fares.—Government exercise full control over rates and fares.

Government have reserved the power to require, at six months' notice, the re-transfer of the Junction station at Waltair and the branch taking off from the Junction to Vizagapatam.

Statistics of working—

TABLE I.							TABLE II.		REMARKS.
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.	
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.		
1890	3,79,490	7,590	—7,590	The figures prior to 1901 relate to the whole of the East Coast (State) railway.
1891	1,10,69,894	...	...	...	2,33,786	—2,33,786	...	...
1892	2,60,11,131	...	...	...	7,41,621	—7,41,621	...	...
1893	3,58,67,473	4,98,660	1,53,732	0·43	18,48,868	—11,95,136	68	84·69	
1894	4,39,47,727	14,80,678	1,50,921	0·34	15,92,909	—14,41,988	98	89·81	
1895	5,09,41,876	19,04,251	3,29,184	0·65	19,12,886	—15,83,702	90	85·71	
1896	6,38,64,948	24,66,573	5,39,901	0·85	23,72,875	—18,32,974	94	77·98	
1897	7,22,26,070	29,21,162	8,92,453	1·23	26,96,796	—18,04,343	100	69·59	
1898	8,24,02,269	28,10,742	6,69,891	0·81	30,98,828	—24,28,997	94	78·46	
1899	8,65,93,097	43,92,237	15,37,294	1·78	35,14,602	—19,77,308	104	65·11	
1900	8,80,71,781	64,04,543	26,54,794	3·01	34,46,555	—7,91,761	143	56·10	
1901	6,07,27,275	45,68,155	20,31,210	3·84	24,51,072	—4,19,862	176	65·62	
1902	6,16,89,605	45,46,551	16,19,128	2·62	24,46,187	—8,27,059	177	64·39	
1903	6,33,33,510	45,18,656	15,53,337	2·45	24,82,162	—9,28,825	176	65·62	
1904	6,43,95,839	50,46,367	15,61,875	2·43	25,44,580	—9,82,705	196	69·08	
1905	6,50,33,641	67,36,215	26,65,781	4·10	25,77,504	+68,277	262	60·43	
1906	6,57,16,083	60,68,407	24,19,766	3·68	26,07,849	—1,87,588	236	60·13	

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 6 **MADRAS RAILWAY SYSTEM—contd.**
Sub-heads (a) to (i)

6 (e) Nilgiri railway (3' 3½" gauge)—

The old Nilgiri Railway Company was registered on the 30th September 1885 with a nominal capital of Rs. 25,00,000 and a contract was executed between the Secretary of State and that Company on the 26th February 1886. The old Company went into liquidation in April 1894, and a new Company was formed in February 1896 to purchase the line from the old Company and supply the capital required to complete it, and to construct the proposed extension to Ootacamund. The line from Mettupalaiyam to Coonoor was completed by the new Company and opened for traffic on the 15th June 1899. On the offer of the new Company to sell the line it was purchased by Government for £235,000 on the 1st January 1908.

Details of construction—

The open mileage of this railway is 16·99 miles. The line connects Mettupalaiyam with Coonoor. It was sanctioned in 1892 and was opened in 1899.

Besides the above there are under construction 11·75 miles, *viz.*, from Coonoor to Ootacamund.

Permanent-way.—The permanent-way consists of flat-footed steel rails, 50-lb. to the yard, laid on pyinkado sleepers. Between Kallar and Coonoor there is also a central rack rail with channel bars.

Ballast.—The line is ballasted with clean broken granite.

Fencing.—The line is fenced throughout.

Curves.—The sharpest curve is of 318 feet radius.

Gradients.—The ruling gradient is 1 in 12·5.

Terms of contract—

The railway is worked by the Madras Railway Company under the following terms (approved in Government of India letter No. 563 R. T., dated the 27th June 1903)—

Government aid.—The line is the property of the State.

Currency of agreement—

Power to determine agreement— } The agreement may be terminated at any time on six months' notice from either party.

Terms of working.—The Nilgiri railway to pay actual outlay on engineering maintenance and for fuel, and repairs and renewals of engines and carriage and wagon stock. For all other expenses of working the Madras railway to receive 25 per cent. of gross earnings, *plus* 10 per cent. of the net receipts.

Rates and fares.—Certain maxima have been fixed within which the Company is permitted to vary rates.

Statistics of working—

TABLE I.										TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Subsidy from Government.	Total income.	Percentage of total income on capital outlay.	Interest.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	
1890	67,850	...	...	...	...	...	...	...	...	...	...
1891	2,89,134	...	...	...	...	...	...	...	...	...	...
1892	8,89,751	...	...	...	...	...	...	...	...	...	...
1893	15,50,000	...	...	...	...	...	...	...	...	...	...
1894	18,50,000	...	...	...	...	...	...	...	...	...	...
1895	22,60,000	...	...	...	...	...	...	...	...	...	...
1896	18,92,610	...	...	...	...	...	...	...	...	...	...
1897	36,84,977	...	...	...	...	...	...	...	...	...	...
1898	44,54,085	...	...	...	...	...	...	...	...	...	...
1899	47,88,944	84,448	20,209	0·42	24,392	44,601	0·93	...	...	175	76·06
1900	48,96,490	1,76,032	86,642	1·77	23,006	1,09,648	2·24	...	...	200	42·63
1901	48,74,254	2,41,336	1,37,893	2·83	...	1,37,893	2·83	...	...	275	42·87
1902	49,08,431	3,09,063	1,12,111	2·28	...	1,12,111	2·28	...	...	352	63·73
1903	35,24,265	2,74,905	73,988	2·10	...	73,988	2·10	1,65,497	—91,509	311	73·09
1904	35,84,423	2,90,129	66,162	1·85	...	66,162	1·85	1,33,384	—67,222	328	77·20
1905	43,86,192	3,15,492	48,972	1·12	...	48,972	1·12	1,35,878	—86,906	357	84·48
1906	50,08,547	3,20,242	37,202	0·74	...	37,202	0·74	1,38,327	—1,01,125	303	88·88

6 (f) Shoranur-Cochin railway (3' 3½" gauge)—**Details of construction—**

The railway is 64·75 miles long and connects Shoranur with Ernakulam. It was sanctioned in 1899 and opened in 1902.

Permanent-way.—The permanent-way consists of 41½-lb. flat-footed steel rails on wooden sleepers.

Ballast.—The line is ballasted throughout with stone and sand, chiefly the former.

Fencing.—The line is fenced in the vicinity of towns, stations and level crossings.

Curves.—The sharpest curve is of 818·57 feet radius.

Gradients.—The ruling gradient is 1 in 80.

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 6} _{Sub-heads (a) to (i)} **MADRAS RAILWAY SYSTEM—contd.**

6 (f) Shoranur-Cochin railway (3' 3½" gauge)—*concl'd.*

Terms of contract—

The Shoranur-Cochin railway is worked under the following agreement:—

Agreement of—1st January 1901 (between His Highness the Raja of Cochin and the Madras Railway Company) for construction and working.

The general conditions of the agreement are as follows:—

Government aid.—The line is the property of the Cochin State.

Currency of agreement.—This agreement is to remain in force until the termination of the agreement, dated the 2nd January 1871, between the Secretary of State and the Madras Railway Company.

Terms of working.—The Company charges for working the same proportion of the total revenue expenditure as the gross earnings of the Shoranur-Cochin railway bear to the gross earnings of the Madras railway system including the Shoranur-Cochin railway. After providing, from the net earnings, for the second contribution to the Madras Railway Provident Institution and for interest at the rate of 3 per cent. per annum on the booked capital expenditure of the Shoranur-Cochin railway including land, the balance is divisible between the Cochin Durbar and the Madras Railway Company in the proportion of four-fifths to the Durbar and one-fifth to the Company.

Rates and fares.—The same as are generally applicable from time to time to the system of railways worked by the Company.

Statistics of working—

TABLE I.					TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1898	53,921	...	...	...	...	...
1899	80,927	...	...	...	...	...
1900	28,47,304	...	...	...	...	...
1901	50,82,280	...	...	...	...	...
1902	63,66,301	1,34,845	73,290	1.15	69	45.64
1903	64,41,690	3,52,964	1,98,023	3.07	105	43.90
1904	67,88,610	3,92,782	1,94,244	2.86	117	50.55
1905	68,30,214	3,86,945	1,61,305	2.36	115	58.20
1906	68,59,349	3,91,378	1,55,689	2.27	116	60.22

6 (g) Morappur-Dharmapuri railway (2' 6" gauge)—

Details of construction—

The railway is 18.53 miles long. It was sanctioned in 1902 as a famine feeder line and was opened in 1906.

Permanent way.—The permanent-way consists of 30-lb. flat-footed steel rails laid on cross sleepers of pyinkado.

Ballast.—The line is ballasted with stone in cuttings and in banks with moorum with stone covering broken to 2" gauge.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 955 feet radius.

Gradients.—The ruling gradient is 1 in 67.

Terms of contract—

The line is worked under the following contract:—

Contract of—4th October 1904 (between the Secretary of State and the Madras Railway Company) for construction, maintenance and working.

The general conditions of the contract are as follows:—

Government aid.—The line is the property of the State.

Currency of contract.—The contract is to continue in force till the 31st December 1907.

Terms of working.—The working expenses are to include per half-year any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year; a sum not exceeding Rs. 40 for every mile of open line for Government supervision and control; the Company to charge for working and maintenance the same proportion of gross earnings which the working expenses of the whole system including this line bear to the gross earnings of that system, provided that such share shall in no case be less than an average sum of Rs. 35 per mile per week. The balance of the gross earnings to belong to Government.

Rates and fares.—Government exercise full control over rates and fares.

Statistics of working—

TABLE I.							TABLE II.	
Calendar year.	Capital outlay to end of the year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1906	8,96,636	82,702	—431	...	30,280	—30,711	87	101.32

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 6}
Sub-heads (a) to (i). **MADRAS RAILWAY SYSTEM—contd.**

6 (A) Tirupattur-Krishnagiri railway (2' 6" gauge)—**Details of construction—**

The railway is 25·38 miles long. It was sanctioned in 1902 as a famine feeder line and was opened in 1905.

Permanent-way.—The permanent-way consists of 30-lb. flat-footed steel rails laid on cross sleepers of Malabar teak.

Ballast.—The line is ballasted with stone in cuttings and moorum in banks with a stone covering broken to 2" gauge.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 955 feet radius.

Gradients.—The ruling gradient is 1 in 67.

Terms of contract—

The line is the property of the State and is worked under the same contract and on the same terms and conditions as apply to the Morappur-Dharmapuri railway [6 (g)].

Statistics of working—

TABLE I.							TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1905	10,68,690	12,440	—1,067	...	18,802	—19,869	34	108·81
1906	10,78,762	46,276	—1,825		30,194	—41,019	35	108·94

6 (i) Salem-Attur railway (5' 6" gauge)—**Details of construction—**

The railway will be 36·06 miles long. It was sanctioned in 1903 as a famine feeder line; but the commencement of work has not yet been authorised.

Number ^{Main head 7}
Sub-head (a) **NAGDA-MUTTRA RAILWAY (5' 6" gauge)—**

Details of construction—

This line which is under construction by the State, will be 380·50 miles long, viz., (1) main line, Nagda to Muttra 340·50 miles, and, (2), Baran branch, Kotah to Baran, 40 miles.

The construction of the main line was sanctioned in 1905 and the Baran branch in 1906.

Number ^{Main head 8}
Sub-heads (a) to (c) **NIZAM'S GUARANTEED STATE RAILWAY SYSTEM—**

Chairman—Charles Albert Winter, Esq.

Secretary—H. Rendel, Esq.

Offices—Winchester House, 50, Old Broad Street, London, E. C.

Lines comprising the system.—The Nizam's Guaranteed State railway system is made up of—

	Open line. Miles.
(a) Nizam's Guaranteed State railway (5' 6" gauge)	330·13
(b) Bezwada Extension railway (5' 6" gauge)	20·58
(c) Hyderabad-Godavari Valley railway (3' 3½" gauge)	391·13
Total	741·84

Running powers—

Home line over foreign line:—

Distant signal at Bezwada to Bezwada station, Madras (North-East line), for passenger and goods trains 1·01

Up to the end of 1878 the line was worked by the Great Indian Peninsula Railway Company with its own rolling-stock. From January 1879 to the 31st December 1884 it was worked by State agency, and from January 1885 by His Highness the Nizam's Guaranteed State Railways Company. The section of the East Coast (State) railway, which extends from the frontier of His Highness the Nizam's dominions to the north distant signal of the Bezwada station, was worked by this Company as part of its own system up to December 1897, when it was transferred to the East Coast (State) railway. It was transferred back to the Company for working from the 1st January 1901.

6 (a) Nizam's Guaranteed State railway proper (5' 6" gauge)—**Details of construction—**

The open mileage of the Nizam's Guaranteed State railway proper is 330·13 miles, which may be divided into main line (Wadi junction to the British frontier), 310·10 miles, and branches, 20·03 miles. Its construction was first sanctioned in 1871 and it was opened through in 1889.

Permanent-way.—The first 47 miles from Wadi are laid with 75-lb. bull-headed steel rails on cast iron pot sleepers and the following 9 miles with 68-lb. double-headed steel rails on cast iron pot sleepers. The remainder of the line is laid with 66½-lb. flat-footed steel rails on steel pea-pod sleepers, with the exception of the mixed (5' 6" and 3' 3½") gauge line from Secunderabad to Hyderabad which has wooden sleepers under the same section of rail.

Ballast.—The line is ballasted throughout with stone and sand.

Fencing.—The line is fenced from Wadi to Secunderabad, but from Secunderabad to the frontier only the station-yards are fenced.

Curves.—The sharpest curve is of 1,300 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Terms of contract—

The railway is worked under the following:—

Contract of—27th December 1883 (between the Nizam's Government and the Nizam's Guaranteed State Railways Company) for construction, maintenance and working.

Letter No. 257 of—7th March 1903 from the Nizam's Government to the Railway Company as to rates and fares.

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 8} Sub-heads (a) to (c) **NIZAM'S GUARANTEED STATE RAILWAY SYSTEM—contd.****8 (a) Nizam's Guaranteed State railway proper (5' 6" gauge)—concl'd.****Terms of contract—concl'd.**

The general conditions are as follows:—

Terms of contract.—The Nizam's Guaranteed State Railways Company was formed in 1883 for the purpose of acquiring and working the then existing railway and of constructing on the same gauge and working certain new lines, with a capital not exceeding £4,500,000 to be raised by the issue of shares and redeemable mortgage debentures (or as may be agreed upon), His Highness the Nizam's Government paying thereon for 20 years an annuity to be applied in payment of interest and towards a sinking fund for the redemption or reduction of capital. Land was provided free of charge.

Note.—The guarantee of His Highness the Nizam's Government on the share capital of £2,000,000 and £984,640 four per cent. debentures expired.

Currency of contract.—The contract is current for a period of 99 years. On expiry by effluxion of time the land, buildings and fixed works, etc., and all rolling-stock, stores, etc., at a fair valuation, revert to the Nizam's Government. The Nizam's Government has the option of purchasing the line on the 1st January 1914, 1934 or 1954, on twelve months' notice, by paying in sterling the capital unredeemed and a bonus of 25 per cent. thereon. In case of breach of contract by the Company the Nizam's Government may give six months' notice and assume possession of the line, etc., by paying the amount of capital unredeemed, unless the default or breach is remedied within that period.

Terms of working.—From gross earnings are deducted working expenses, and during the guaranteed period the net earnings are applied in the first instance to repayment of the annuity paid in the same half-year. Of the residue one moiety is utilised towards the repayment of previous payments of annuity and sums owing to the Nizam's Government, and the balance is paid to the Company. After the expiration of the annuity, a sum sufficient for payment of interest on the capital unredeemed will be retained by the Company, and of the balance one-half will be paid to the Nizam's Government, the remaining half being made over to the Company.

Rates and fares.—The rates and fares not to be higher than those adopted in 1883, except with the previous assent of the Nizam's Government.

Statistics of working—

TABLE I.					TABLE II. (Includes Bezwada Extension.)	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1879	1,16,46,997	6,94,401	89,925	0.77	110	87.01
1880	1,21,90,870	7,02,716	2,48,604	2.04	112	68.08
1881	1,22,85,291	7,56,834	2,88,666	2.35	120	61.32
1882	1,22,27,794	8,59,418	3,75,099	3.07	141	56.35
1883	1,22,83,560	8,53,521	2,37,932	1.94	137	72.12
1884	1,23,08,720	9,72,917	4,70,327	3.82	155	63.02
1885	2,03,60,998	11,13,950	4,87,034	2.37	178	56.26
1886	2,71,49,342	13,81,077	6,94,524	2.56	143	49.71
1887	2,69,71,143	15,48,891	5,52,905	2.05	143	64.81
1888	3,55,11,854	17,76,075	7,57,467	2.13	118	57.35
1889	3,59,46,922	22,57,462	7,72,513	2.15	129	66.90
1890	3,77,11,194	25,07,268	10,39,590	2.76	140	59.74
1891	3,95,18,791	27,76,437	12,57,860	3.19	151	51.70
1892	3,95,48,395	27,80,642	13,24,959	3.35	151	53.35
1893	4,01,96,909	30,61,605	14,36,451	3.57	136	53.08
1894	4,02,33,826	32,56,885	16,22,028	4.03	177	50.20
1895	4,06,43,819	32,15,541	15,77,149	3.89	185	53.77
1896	4,08,24,737	33,03,522	17,28,196	4.24	187	50.02
1897	4,09,60,914	36,10,354	19,38,760	4.73	205	48.67
1898	4,10,54,449	39,07,612	22,74,580	5.54	221	44.20
1899	4,15,08,731	41,10,201	25,01,046	6.02	240	43.45
1900	4,17,49,124	49,12,056	28,41,985	6.81	266	41.52
1901	4,24,30,543	40,77,927	26,48,120	6.24	236	35.59
1902	4,28,89,527	44,06,404	26,82,533	6.25	254	39.89
1903	4,30,13,668	43,18,630	25,38,986	5.90	251	41.79
1904	4,32,66,412	48,32,440	27,90,690	6.45	252	36.18
1905	4,35,86,043	42,78,161	28,49,703	6.54	251	38.98
1906	4,36,45,097	44,84,105	27,98,897	6.41	262	38.12

8 (b) Bezwada Extension railway (5' 6" gauge)—**Details of construction—**

This railway is 20.58 miles long and extends from the Hyderabad frontier to Bezwada. Its construction was sanctioned in 1886 and it was opened in 1889.

Permanent-way.—The line is laid with 86½-lb. flat-footed steel rails on steel pen-pod sleepers, except at miles 317 and 318 which are laid on wooden sleepers.

Ballast.—The line is ballasted throughout with stone and sand.

Fencing.—The line is fenced at stations only.

Curves.—There are no curves with a radius of less than 1,900 feet.

Gradients.—The ruling gradient is 1 in 100.

Terms of contract—

The line is maintained and worked for the same percentage of its gross earnings as the aggregate working expenses of the amalgamated undertaking of the 5' 6" gauge system bear to the aggregate gross earnings for the same half-year plus 5 per cent. of the gross earnings of the Bezwada extension railway for the use of rolling-stock, and the cost of Government Audit establishment and interest on joint works at Bezwada.

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 8 **NIZAM'S GUARANTEED STATE RAILWAY SYSTEM—contd.**
Sub-heads (a) to (c).

8 (b) Bezwada Extension railway (5'6" gauge)—concl'd.

Statistics of working—

TABLE I.							TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Gain or loss to the State.	Earnings per mile per week.	Proportion expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1887	8,11,654	...	...	...	16,363	-16,363		
1888	11,50,237	...	...	...	39,357	-39,357		
1889	13,46,302	76,071	16,326	1.21	53,530	-37,204		
1890	13,90,830	74,731	16,318	1.17	54,530	-38,212		
1891	14,11,077	87,367	28,699	2.03	56,266	-27,567	Included with the Nizam's Guaranteed State railway proper.	
1892	14,17,074	98,779	28,347	2.00	56,584	-28,237		
1893	14,21,456	1,08,386	33,972	2.39	56,888	-22,916		
1894	14,26,901	1,71,016	71,270	5.00	57,122	+14,148		
1895	14,31,042	95,119	95,119	6.64	57,239	+37,880		
1896	14,35,588	73,057	38,496	2.68	57,406	-18,910		
1897	14,86,118	1,66,800	56,645	3.79	58,383	-1,738		
1898	15,01,313	1,69,061	95,390	6.35	59,569	+35,821		
1899	15,02,651	3,12,172	1,84,365	12.27	60,101	+1,24,264		
1900	15,02,618	3,56,146	2,38,989	15.90	60,106	+1,78,883		
1901	11,51,678	2,77,177	1,56,929	13.63	35,509	+1,21,420		
1902	11,60,425	2,89,663	1,40,329	12.08	46,375	+93,654		
1903	11,77,047	3,25,363	1,67,432	14.22	46,617	+1,20,715		
1904	11,75,731	2,93,153	1,53,358	13.04	46,898	+1,06,460		
1905	11,78,645	3,47,490	2,04,239	17.33	47,046	+1,57,193		
1906	11,81,020	3,49,206	1,91,737	16.23	47,182	+1,44,555		

8 (c) Hyderabad-Godavari Valley railway (3' 3½" gauge)—

Details of construction—

This railway connects Manmad with Hyderabad and is 391.13 miles long. Its construction was sanctioned in 1897 and it was opened through in 1901.

Permanent way.—The permanent way consists of 50-lb. flat-footed steel rails on steel pea-pod sleepers from mile 0 to 3½ and 39 to 49½, except within station limits, on steel and wooden sleepers from mile 302 to 384 and on wooden sleepers for the remainder.

Ballast.—The line is ballasted throughout with stone, sand and moorum.

Fencing.—The line is fenced from mile 377½ to 381 and at all stations.

Curves.—The sharpest curve is of 1,433 feet radius.

Gradients.—The ruling gradient is 1 in 133.3.

Terms of contract—

The railway is worked under the following agreement :—

Agreement of.—16th March 1897 (between His Highness the Nizam's Government and the Nizam's Guaranteed State Railways Company) for construction and working.

The general conditions of the agreement are as follows :—

Terms of contract.—Capital to the extent of £2,500,000 to be raised by the issue of redeemable mortgage debentures, the Nizam's Government paying thereon an annuity, and, in addition, a sum of one per cent. per annum for 20 years towards a sinking fund for the redemption of such debentures which will be a first charge on the Hyderabad-Godavari Valley railway and a second charge on the Nizam's Guaranteed State railway; after the expiration of the guaranteed period the interest payable thereon to be a first charge on the net earnings of the former line and a second charge on the surplus net earnings of the latter line after the service of the existing debenture debt has been provided for. The free use of land is provided for.

Currency of contract.—On expiry of the contract by effluxion of time the land, buildings and fixed works, etc., and all rolling-stock, stores, etc., at a fair valuation, revert to the Nizam's Government. The contract runs concurrently with that of the Nizam's Guaranteed State Railways Company, and the Nizam's Government has the option of purchasing the line on the 1st January 1914, on twelve months' notice, by paying in sterling the capital unredeemed and a bonus of 25 per cent. thereon, or on the 1st January 1934 or 1954 without bonus. In case of breach of contract by the Company the Nizam's Government may give six months' notice and assume possession of the line, etc., by paying the amount of capital unredeemed, unless the default or breach is remedied within that period.

Power of Company to surrender contract.—Nil.

Terms of working.—From the gross earnings are deducted working expenses, and the net earnings are applied in the first instance towards replacing the amount paid as interest on capital during construction, and during the guaranteed period to repayment of the annuity paid in same half-year, and not more than half the residue to repayment of previous payments of annuity, the remaining moiety being added to and dealt with as part of the net earnings of the Company in respect of the Nizam's Guaranteed State railway. After expiration of the annuity a sum sufficient for payment of interest on the capital unredeemed to be retained by the Company, and of the balance one-half to be paid to the Nizam's Government the remaining moiety being dealt with as above.

Rates and fares.—Rates and fares not to be in excess of those prevailing on the Nizam's Guaranteed State railway.

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 8} _{Sub-heads (a) to (c)} **NIZAM'S GUARANTEED STATE RAILWAY SYSTEM—concl'd.****8 (c) Hyderabad-Godavari Valley railway (3' 3½" gauge)—concl'd.**

Statistics of working—

TABLE I.					TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1896	3,74,350	...	...	...	...	...
1897	17,61,352	...	...	...	...	...
1898	86,55,416	...	...	...	...	...
1899	2,00,21,979	63,381	36,877	0·18	48	41·82
1900	2,31,94,817	10,63,023	4,20,826	1·81	70	60·41
1901	2,44,37,419	20,10,033	9,23,300	3·77	99	54·07
1902	2,57,75,220	22,88,043	9,67,892	3·76	112	57·79
1903	2,62,07,241	22,14,752	8,86,291	3·38	109	59·98
1904	2,61,85,096	22,11,781	7,74,804	2·93	109	64·97
1905	2,68,15,349	29,64,122	13,29,009	4·96	146	55·16
1906	2,69,36,746	30,32,503	14,21,747	5·29	149	53·12

Number ^{Main head 9} _{Sub-heads (a) to (l)} **NORTH-WESTERN (STATE) RAILWAY SYSTEM—**

Lines comprising the system.—The North Western (State) railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(a) North Western (State) railway (5' 6" gauge)	3,371·71	268·94	3,640·65
(b) Amritsar-Patti railway (5' 6" gauge)	27·49	...	27·49
(c) Jammu and Kashmir (Native state section) (5' 6" gauge)	15·98	...	15·98
(d) Ludhiana-Dhuri-Jakhal railway (5' 6" gauge)	78·65	...	78·65
(e) Rajpura-Bhatinda railway (5' 6" gauge)	107·05	...	107·05
(f) Southern Punjab railway (5' 6" gauge)	425·33	...	425·33
(g) Southern Punjab "Ludhiana" Extension railway (5' 6" gauge)	155·05	...	155·05
(h) Khushalgarh-Kohat-Thal railway (2' 6" gauge)	91·73	...	91·73
(i) Nowshera-Durgai railway (2' 6" gauge)	40·25	...	40·25
(j) Daudot Light railway (2' 0" gauge)	6·18	...	6·18
(k) Jullundur-Kapurthalla-Sultanpur (British section)	...	6·80	6·80
(l) Jullundur-Kapurthalla-Sultanpur (Native State section)	...	22·02	22·02
	Total	297·76	4,617·18

Running powers—

Home line over foreign line:—	Miles.
East Indian railway, Ghaziabad to Delhi, for passenger and goods trains	18·00

9 (a) North Western (State) railway proper (5' 6" gauge)—

Details of construction—

The open mileage of the North Western (State) railway proper is 3,371·71 miles, of which 199·77 miles are double line. This may be divided into (1) the *Commercial section*, main line (Ghaziabad to Peshawar and Lahore to Karachi), 1,444·70 miles, and branches, 802·69 miles; (2) *Military section, Sind Sagar*, main line (Lala Musa to Sher-Shah), 344·59 miles, and branches, 227·14 miles; (3) *Military section, Sind Pishin* (Ruk to Chaman), 336·03 miles; (4) *Military section, Mushkaf-Bolan*, main line (Sibi to Quetta), 86·74 miles, and branches, 35·74 miles; (5) *Military section, Quetta-Nushki* (Spezand Junction to Nushki), 83·04 miles; and (6) *Peshawar-Jamrood branch*, 11·04 miles. The first sanction to the main line of this railway was given in 1859. It was opened through to Peshawar in 1883 and from Lahore to Karachi in 1889.

There are 268·94 miles, single line, under construction and 204·15 miles of existing single line are in course of being doubled.

Permanent-way.—The permanent-way is of various types. On the single line, of iron rails there are 60-lb. flat-footed, 68-lb. double-headed, 60-lb. bull-headed, 82-lb. double-headed and 68-lb. bull-headed; of steel rails there are 70-lb. flat-footed, 62-lb. flat-footed, 75-lb. flat-footed, 64-lb. double-headed, 68-lb. double-headed, 75-lb. double-headed, 68-lb. bull-headed, 84-lb. bull-headed, 100-lb. flat-footed, 77½-lb. bull-headed, 73-lb. bull-headed and 85-lb. bull-headed. On the double line, of iron rails there are 68-lb. double-headed; of steel rails there are 68-lb. double-headed, 75-lb. flat-footed, 77½-lb. bull-headed and 100-lb. flat-footed. The sleepers used are chiefly of wood, but cast-iron (oval or round) pots and steel transverse sleepers are also extensively used.

Ballast.—The line is ballasted throughout with sand, bricks and broken stone.

Fencing.—The line is fenced from Karachi to Lahore and from Lala Musa to Ghaziabad, also from Ruk to Jhatpat. The line between Lala Musa and Peshawar is partially fenced.

Curves.—The sharpest curve is of 408 feet radius.

Gradients.—The ruling gradient between Kotri and Rohri, and Sibi and Ruk, is 1 in 500; between Ghaziabad and Lala Musa, and Kotri and Lahore, 1 in 400; between Karachi and Kotri, 1 in 189; and between Lala Musa and Peshawar, 1 in 100. The ruling gradients on the Sind-Sagar, Mari-Attock, Sind-Pishin and Mushkaf-Bolan lines are 1 in 400, 1 in 80, 1 in 40 and 1 in 25, respectively.

Terms of contracts—

Nil. The line is owned and worked by the State.

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 9 NORTH WESTERN (STATE) RAILWAY SYSTEM—contd.
Sub-heads (a) to (l)

9 (a) North Western (State) railway proper (5' 6" gauge)—contd.

Statistics of working—

TABLE I.									TABLE II.												
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Annuity.	Surplus profits paid to Company.	Gain or loss to the State.	North Western (State).												
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	Calendar year.	Sind. Punjab and Delhi, 5' 6".	Punjab-Northern, 5' 6".	Indus Valley and Kandahar, 5' 6".	Amritsar-Pathankot, 5' 6".	Commercial section.	Military section.	Entire line.					
										Earnings per mile per week.	Pro. of exp. to earnings.	Earnings per mile per week.	Pro. of exp. to earnings.	Earnings per mile per week.	Pro. of exp. to earnings.	Earnings per mile per week.	Pro. of exp. to earnings.	Earnings per mile per week.	Pro. of exp. to earnings.	Earnings per mile per week.	Pro. of exp. to earnings.
1879	21,67,61,217	1,51,37,621	55,30,470	2.55	1,00,29,015	...	...	- 14,92,115	1881	112 79 50	...	...	...	...	...	...	...	...	...	...	...
1880	25,06,35,401	1,00,30,066	75,53,561	3.02	1,11,50,919	...	21,121	- 36,12,349	1882	171 83 04	...	...	...	...	...	...	...	...	...	...	...
1881	26,38,29,396	90,04,725	46,13,547	1.75	1,17,61,808	...	...	- 71,51,321	1883	170 57 28	...	...	...	...	...	...	...	...	...	...	...
1882	27,49,44,870	82,43,072	57,96,011	2.11	1,05,83,712	...	...	- 17,37,701	1884	101 82 18	...	...	...	...	...	...	...	...	...	...	...
1883	28,18,15,806	1,03,41,145	57,10,241	3.69	1,07,43,001	...	...	20,24,688	1885	116 70 15	...	...	...	...	...	...	...	...	...	...	...
1884	29,20,27,775	1,07,68,718	88,21,631	9.02	1,18,26,701	...	...	- 30,05,070	1886	121 89 08	...	...	...	...	...	...	...	...	...	...	...
1885	31,60,13,468	1,40,78,093	1,37,44,127	4.34	1,64,08,037	...	1,25,853	- 28,50,525	1887	112 95 60	...	...	...	...	...	...	...	...	...	...	...
1886	33,88,08,533	2,53,60,001	1,10,92,830	3.54	1,14,07,148	61,64,793	...	- 47,15,042	1888	117 80 70	...	...	...	...	...	...	...	...	...	...	...
1887	36,16,48,700	2,10,08,384	57,77,555	1.60	1,01,66,779	84,30,322	...	- 132,40,510	1889	122 00 08	...	...	...	...	...	...	...	...	...	...	...
1888	37,50,63,628	2,57,79,395	83,66,598	2.23	1,00,18,078	83,45,750	...	- 1,08,98,000	1890	134 85 77	...	...	...	...	...	...	...	...	...	...	...
1889	38,73,09,431	2,52,06,820	1,02,84,741	2.66	1,13,76,516	83,68,708	...	- 94,90,534	1891	154 18 67	...	...	...	...	...	...	...	...	...	...	...
1890	41,54,07,180	2,73,09,035	1,02,57,001	2.47	1,16,66,545	71,51,323	...	- 88,64,307	1892	101 55 35	...	...	...	...	...	...	...	...	...	...	...
1891	41,87,30,071	3,25,78,355	1,21,32,521	2.90	1,20,67,512	50,05,209	...	- 70,40,321	1893	161 61 03	61 63 41	...	...	...	...	...	...	...	...	...	...
1892	42,71,90,070	3,64,35,065	94,50,900	2.21	1,24,26,030	80,84,076	...	- 1,10,59,110	1894	180 07 03	101 77 27	...	...	...	...	...	...	...	...	...	...
1893	43,71,03,581	3,62,68,732	97,97,643	2.24	1,27,61,682	90,98,543	...	- 1,20,02,584	1895	241 57 16	130 86 81	...	...	...	...	...	...	...	...	...	...
1894	44,78,05,925	3,23,14,097	1,28,25,181	2.80	1,21,63,276	1,03,69,245	...	- 50,97,343	1896	234 04 50	169 00 36	56 122 07	...	...	...	...	...	...	...	...	...
1895	46,28,14,402	3,62,18,382	1,64,40,968	3.55	1,35,01,193	1,03,17,345	...	- 73,71,580	1897	317 00 22	945 79 52	121 81 16	...	...	...	...	...	...	...	...	...
1896	47,81,00,802	2,94,41,740	1,18,96,100	2.49	1,42,35,427	96,43,598	...	- 1,19,92,106	1898	352 55 02	360 83 25	209 71 15	...	...	...	...	...	...	...	...	...
1897	48,79,25,286	3,20,03,448	1,40,78,597	3.07	1,45,40,294	90,95,191	...	- 66,56,592	1899	285 69 76	108 50 64	155 79 73	...	...	...	...	...	...	...	...	...
1898	49,37,11,910	3,70,01,912	1,85,74,360	3.70	1,50,41,459	58,35,840	...	- 61,02,948	1900	285 06 00	151 83 74	141 60 17	...	...	...	...	...	...	...	...	...
1899	50,01,64,031	3,62,21,759	1,00,50,223	3.22	1,50,40,208	85,61,496	...	- 75,12,391	1901	296 57 13	144 81 11	203 55 55	...	...	...	...	...	...	...	...	...
1900	50,57,26,113	3,16,23,237	1,32,10,151	2.61	1,54,25,164	85,76,682	...	- 1,07,82,005	1902	290 01 20	130 72 34	210 69 40	67 55 78	...	...	...	...	...	...	...	...
1901	51,04,27,448	4,11,80,277	2,03,56,471	3.99	1,55,50,604	80,03,222	...	- 37,06,446	1903	373 57 35	165 62 69	309 40 85	81 90 28	...	...	...	...	...	...	...	...
1902	52,63,16,084	4,23,10,927	1,73,70,004	3.31	1,50,60,500	85,81,455	...	- 71,80,021	1904	...	...	...	...	...	...	...	...	...	...	...	...
1903	53,81,87,881	4,03,83,876	1,50,09,517	4.00	1,62,88,103	85,77,430	...	+ 1,42,964	1905	...	...	...	...	...	...	...	...	...	...	...	...
1904	54,52,89,823	6,16,50,310	3,22,02,009	5.92	1,67,34,700	85,77,430	...	+ 60,80,779	1906	...	...	...	...	...	...	...	...	...	...	...	...
1905	57,60,84,021	5,86,74,943	2,80,53,383	5.04	1,72,13,261	85,77,430	...	+ 32,01,602	...	...	...	...	...	...	...	...	...	...	...	...	...
1906	60,67,74,836	6,18,06,041	2,93,40,019	4.84	1,80,71,178	85,77,430	...	+ 26,93,311	...	...	...	...	...	...	...	...	...	...	...	...	...

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 112.]

Number ^{Main head 0}_{Sub-heads (a) to (l)} . NORTH WESTERN (STATE) RAILWAY SYSTEM—*contd.*

9(b) Amritsar-Patti railway (5' 6" gauge)—

Details of construction—

This line, from Amritsar *via* Tarn Taran to Patti, is 27·49 miles long. It was sanctioned in 1905 and opened in 1906.

Permanent-way.—The permanent-way consists of 60-lb. flat-footed steel rails laid on deodar sleepers.

Ballast.—The line has not been yet ballasted.

Fencing.—Station yards only are fenced.

Curves.—The sharpest curve is of 2,292 feet radius.

Gradients.—The ruling gradient is 1 in 400.

Terms of contracts—

The railway is worked under the following :—

Contract of.—22nd March 1905 (between the Secretary of State and the Amritsar-Patti Railway Company) for working.

The general conditions of the contract are as follows :—

Government aid.—A rebate is allowed up to 45 per cent. of the gross earnings from traffic (except the earnings derived from the carriage of stores) inter-changed between the North Western railway and the Amritsar-Patti railway so as to make up an amount equal to interest for the year at a rate of 5 per cent. per annum on the actual capital expenditure plus Rs. 6,000 for each year for or towards the office expenses and the expenses of management and direction. Land provided free.

Currency of contract.—Government may, by giving 12 months' notice, determine the contract on 31st December 1935 or at the end of any subsequent period of 10 years paying the Company in rupees a sum equal to 25 times the average yearly net earnings of the Company during the last preceding three years but not exceeding by more than 20 per cent. the total capital expenditure of the Company nor being less than such capital expenditure.

Terms of working.—Government undertake to work and maintain the line and provide rolling stock at 45 per cent. of the gross earnings. When the net earnings of the Company in any year shall exceed the minimum amount sufficient to pay a dividend of 5 per cent. per annum such excess shall be applied towards the payment of office expenses and the expenses of management and direction up to a limit of Rs. 9,000 for such year and the balance, if any, shall be divided equally between Government and the Company.

Rates and fares.—Rates and fares to be fixed by Government within the maxima and minima rates and fares in force on the North Western railway.

Statistics of working.—

TABLE I.					TABLE II.	
Calendar year.	Capital expenditure to end of the year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1906	11,90,964	15,368	8,453	0·71	69	45·00

9(c) Jammu and Kashmir (Native State section) (5' 6" gauge)—

Details of construction—

This line, which extends from the Kashmir frontier to the left bank of the Tawi river near Jammu, is 15·98 miles long. Its construction was sanctioned in 1888 and it was opened in 1890.

Permanent-way.—The permanent-way consists of 75-lb. flat-footed steel rails laid on transverse sleepers of creosoted pine and deodar.

Ballast.—The line is ballasted throughout with broken stone.

Fencing.—The line is unfenced except at Sialkot station.

Curves.—The sharpest curve is of 2,865 feet radius.

Gradients.—The ruling gradient is 1 in 500.

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 112.]

Number ^{Main head 9}_{Sub-heads (a) to (i)} NORTH WESTERN (STATE) RAILWAY SYSTEM—*contd.*9(c) Jammu and Kashmir (Native State section) (5' 6" gauge)—*concl'd.*

Terms of contracts—

The railway is worked by the State under the following agreement :—

Agreement of—2nd February 1906, having effect from 1st January 1903, (between the Government of India and the Kashmir Durbar) for working.

The general conditions of the agreement are as follows :—

Government aid.—Government allow this railway, in addition to 44·5 per cent. of the gross earnings of the Tawi-Suchetgarh section, a rebate payment on interchanged traffic to the extent necessary to give the Durbar a total dividend of 3½ per cent. per annum on the actual expenditure to the end of the half-year concerned as entered in rupees in the capital account of the said railway—subject to a maximum limit equal to the net earnings of the North Western (State) railway from traffic interchanged with this section.

Currency of agreement.—The agreement is current for a period of five years from 1st January 1903 and is terminable thereafter on six months' notice by either side.

Terms of working.—The North Western (State) railway works and maintains the line for 55·5 per cent. of its gross earnings, which includes both hire of necessary locomotives and rolling stock and the cost, subject to a limit of Rs. 30 per mile per annum, of such new minor works as are usually charged to revenue on the North Western (State) railway. The cost of additional works usually charged to capital is to be found by the Durbar, no charge being made by the North Western (State) railway for supervision of the construction of such capital works except where special establishment is required.

Rates and fares.—Rates and fares are those which are from time to time in force on the main line of the North Western (State) railway.

Statistics of working—

TABLE I.								TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Rebate from North Western (State) railway.	Total income.	Percentage on total income.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1888 . . .	29,545	...	...	...	...	...	...	...	...
1889 . . .	7,51,458	...	...	...	...	...	...	...	...
1890 . . .	12,37,071	45,667	13,770	1·11	...	...	...	...	...
1891 . . .	13,80,083	57,312	15,904	1·15	...	...	...	Included with the North Western (State) railway.	
1892 . . .	9,45,302	41,718	15,444	1·63	...	...	...
1893 . . .	9,56,327	54,637	14,332	1·50	...	...	...
1894 . . .	9,59,773	60,403	17,553	1·83	...	...	...
1895 . . .	9,60,010	56,239	25,026	2·60	...	...	...
1896 . . .	9,60,011	55,185	24,558	2·55	...	...	...	58 62 67 63 66	55·50 55·50 55·50 55·50 55·50
1897 . . .	9,65,151	48,509	21,587	2·24	...	...	...
1898 . . .	9,62,846	48,164	21,433	2·23	...	...	...
1899 . . .	9,66,820	51,532	22,932	2·39	...	...	...
1900 . . .	9,60,492	55,215	24,571	2·56	...	...	...
1901 . . .	9,60,630	52,484	23,355	2·43	...	...	...	63	55·50
1902 . . .	9,62,471	51,805	23,080	2·40	...	...	...	63	55·50
1903 . . .	9,62,284	54,881	24,422	2·54	9,253	33,680	3·50	66	55·50
1904 . . .	9,62,208	56,231	25,023	2·60	8,655	33,678	3·50	68	55·50
1905 . . .	9,62,208	66,842	29,745	3·09	4,540	34,285	3·57	80	55·50
1906 . . .	9,78,566	77,688	34,571	3·58	684	35,255	3·60	93	55·50

9(d) Ludhiana-Dhuri-Jakhal railway (5' 6" gauge)—

Details of construction—

This railway is 78·65 miles long. Its construction was sanctioned in 1899 and it was opened in 1901.

Permanent-way.—The permanent-way consists of 75-lb. flat-footed steel rails laid on transverse sleepers of creosoted pine and deodar.

Ballast.—The line is ballasted throughout with broken brick.

Fencing.—Only station yards and about 100 feet on each side of level crossings are fenced.

Curves.—The sharpest curve is of 1,364 feet radius.

Gradients.—The ruling gradient is 1 in 400.

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 9} Sub-heads (a) to (i). **NORTH WESTERN (STATE) RAILWAY SYSTEM—contd.****9(d) Ludhiana-Dhuri-Jakhal railway (5' 6" gauge)—concl'd.****Terms of contract—**

The railway is worked under the contract of 6th September 1899 (between the Secretary of State and the Malerkotla and Jind Durbars) for construction and working.

The general conditions of the contract are as follows :—

Government aid.—Nil. The line was constructed at the cost of the Malerkotla and Jind Durbars.

Currency of contract.—The contract is terminable on the 1st January or 1st July in any year on six months' notice by either party. The contract may also be determined by the Secretary of State for breach of any of its provisions if they are not remedied within six months of being notified. Upon the determination of the contract the North Western (State) railway will give to the Malerkotla and Jind Durbars possession of the railway, works, surveys and stores, and, on this being done, the Malerkotla and Jind Durbars will indemnify the North Western (State) railway from all debts and liabilities incurred for the Ludhiana-Dhuri-Jakhal railway then subsisting. The working stores provided by the North Western (State) railway may, if desired by that railway, be taken over at a valuation to be mutually agreed upon.

Terms of working.—After deduction of 55 per cent. of the gross receipts for working expenses the balance is paid to the Malerkotla and Jind Durbars to be divided between them in the proportion of $\frac{1}{5}$ th and $\frac{4}{5}$ ths, respectively.

Rates and fares.—Rates and fares as in force on the North Western (State) railway.

Statistics of working—

TABLE I.					TABLE II.		REMARKS.
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.	
	Rs.	Rs.	Rs.		Rs.		
1901	43,10,407	2,02,297	91,034	2.11	68	55.00	The decrease in Capital outlay in 1903 was due to credits.
1902	43,24,739	4,05,005	1,82,252	4.21	99	55.00	
1903	41,10,964	3,15,026	1,41,762	3.44	77	55.00	
1904	41,19,634	3,46,059	1,55,727	3.78	85	55.00	
1905	41,25,517	5,15,007	2,31,753	5.62	126	55.00	
1906	41,70,693	6,44,063	2,89,829	6.95	157	55.00	

9(e) Rajpura-Bhatinda railway (5' 6" gauge)—**Details of construction—**

This railway is 107.05 miles long. Its construction was first sanctioned in 1883 and it was opened through in 1889.

Permanent-way.—The line from Rajpura to Patiala is laid with 68-lb. bull-headed steel rails on deodar sleepers, and from Patiala to Bhatinda with 75-lb. flat-footed steel rails on creosoted pine and deodar sleepers.

Ballast.—The line is ballasted throughout with broken brick.

Fencing.—The line is fenced between Rajpura and Patiala at station yards, and 100 feet on each side of level crossings between Patiala and Bhatinda.

Curves.—The sharpest curve is of 1,146 feet radius.

Gradients.—The ruling gradient is 1 in 500.

Terms of contract—

The railway is owned by the Patiala State and is worked by the North Western (State) railway under the following :—

Contract of—30th January 1893 (between the Secretary of State and the Patiala Durbar) for maintenance and working.

Government of India letter No. 817 R. T. of 5th October 1903, sanctioning the reduction in the percentage of gross earnings to be retained by the North Western (State) railway for working, from 55 to 52, with effect from 1st January 1904.

The general conditions of the contract are as follows :—

Government aid.—Nil. The line was constructed at the cost of the Patiala Durbar.

Currency of contract.—The contract is terminable on the 1st January or 1st July in any year, on six months' notice by either party. On breach of any of the provisions of the contract, if not remedied within six months of notice, the Secretary of State may determine the contract. Upon the determination of the contract the North Western (State) railway will give to the Patiala Durbar possession of the railway, works, surveys and stores, and, on this being done, the Patiala Durbar will indemnify the North Western (State) railway from all debts and liabilities incurred for the Rajpura-Bhatinda railway then subsisting. The working stores provided by the North Western (State) railway may, if desired by that railway, be taken over at a valuation to be mutually agreed upon.

Terms of working.—55 per cent. of the gross earnings to end of 1903 and 52 per cent. thereafter.

Rates and fares.—Rates and fares as in force on the North Western (State) railway.

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 112]

Number ^{Main head} _{Sub-heads (a) to (f)}. NORTH WESTERN (STATE) RAILWAY SYSTEM—*contd.*9(e) Rajpura-Bhatinda railway (5' 6" gauge)—*concl'd.*

Statistics of working—

TABLE I.					TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1884	11,13,250	5,111	—496	...	17	108.72
1885	12,29,141	48,769	—4,255	...	50	108.09
1886	12,29,141	61,623	13,816	1.12	78	78.63
1887	12,43,250	} Not available	15,425	1.24	} Included with North Western (State) railway.	
1888	22,61,996		18,640	0.82		
1889	62,83,918	1,04,180	58,103	0.93	74	55.00
1890	65,00,331	5,66,946	2,55,126	3.99	101	55.00
1891	65,81,553	7,19,850	3,23,937	4.93	128	55.00
1892	66,41,382	5,64,063	2,53,824	3.82	110	55.00
1893	67,29,341	6,81,347	3,07,056	4.58	122	55.00
1894	67,01,609	12,59,932	5,66,565	8.45	224	55.00
1895	67,02,457	13,18,902	5,93,506	8.66	235	55.00
1896	66,95,813	9,97,526	4,49,082	6.71	173	55.00
1897	66,96,131	6,96,927	3,13,617	4.63	124	55.00
1898	67,04,520	7,02,637	3,16,187	4.72	125	55.00
1899	67,05,785	6,79,520	3,05,784	4.56	122	55.00
1900	67,05,785	6,85,804	3,12,211	4.66	125	55.00
1901	67,10,823	8,60,612	3,57,289	5.77	155	55.00
1902	67,12,917	8,40,917	3,78,126	5.64	151	55.00
1903	67,18,890	9,64,092	4,34,801	6.46	173	55.00
1904	67,23,131	10,67,925	5,12,604	7.62	192	55.00
1905	67,18,631	12,43,390	6,61,628	8.95	225	55.00
1906	68,02,550	11,97,174	5,69,825	8.37	213	55.00

9(f) Southern Punjab railway (5' 6" gauge)—

Chairman.—Sir Bradford Leslie, M.I.C.E., K.C.I.E.*Secretary.*—Urban Broughton, Esq.*Offices.*—70, Cornhill, London, E. C.

The railway runs from Delhi, *via* Bhatinda, to Samasata on the North Western (State) railway, shortening the distance by railway between Delhi and Karachi by 187 miles as compared with the route *via* Umballa and Lahore.

Details of construction—

The mileage amounts to 425.33 miles, which may be divided into main line (Delhi to Samasata), 401.95 miles, and branch, 23.38 miles. The main line was opened through in 1897.

Permanent-way.—The permanent-way consists of 75-lb. flat-footed steel rails laid on transverse sleepers of creosoted pine and deodar.

Ballast.—The line is ballasted throughout with broken brick.

Fencing.—Only the station yards are fenced.

Curves.—The sharpest curve is of 2,100 feet radius.

Gradients.—The ruling gradient is 1 in 400.

Terms of contracts—

The railway is worked under the following contracts:—

Contract of—13th August 1895 (between the Secretary of State and the Southern Punjab Railway Company) for construction and working.

4th May 1899 (between the Secretary of State and the Southern Punjab Railway Company) for construction and working of the Narwana-Kaithal branch.

4th October 1905 (between the Secretary of State and the Southern Punjab Railway Company) for construction and working of the Southern Punjab "Ludhiana" extension, 9 (j).

The general conditions of the contracts are as follows:—

Government aid.—Government allow the Company in respect of each half-year, by way of rebate on the net earnings of the North Western (State) railway from traffic interchanged with the Southern Punjab railway and from through traffic between stations of the North Western (State) railway sent over the Southern Punjab railway, such a sum (not exceeding the amount of such net earnings of the North Western (State) railway) as together with the Company's net earnings make up an amount equal to interest for the year at the rate of 3½ per cent. on the actual rupee expenditure charged in the capital account. Land was provided free of cost to the Company.

Currency of contract.—Government may, by giving twelve months' notice, determine the contract on the 31st December 1923, or at the expiration of any subsequent period of ten years, paying to the Company in sterling a sum equal to 25 times the average of the Company's share of the net earnings of the railway during the last preceding five years, not exceeding by more than 20 per cent. the total capital expenditure of the Company in sterling nor being less than such capital expenditure. Government may also determine the contract on the 31st December 1943, paying to the Company in sterling a sum equal to the total capital expenditure in sterling.

Power of Company to surrender contract.—Nil.

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 9} Sub-head (a) to (f). **NORTH WESTERN (STATE) RAILWAY SYSTEM—contd.****9(f) Southern Punjab railway (5' 6" gauge)—concl'd.****Terms of contracts—concl'd.**

Terms of working.—Government undertake to work and maintain the line and provide rolling-stock at 52 per cent. of the gross earnings. Surplus profits in excess of 3½ per cent. per annum on the total capital expenditure in sterling are divisible equally at the close of each year between the Government and the Company. The North Western (State) railway take all receipts from traffic between its own stations including Delhi and Samasata, but excluding the Patiala State railway, which passes over the Southern Punjab railway. The Company, in addition to its earnings from local and interchanged traffic, receives, where it forms part of the shortest route, its mileage proportion of traffic between the North Western (State) railway and foreign lines.

Rates and fares.—Rates and fares are fixed by Government within the maxima and minima rates and fares in force on the North Western (State) railway.

Statistics of working—

TABLE I.								TABLE II.		REMARKS.
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Rebate from N. W. (S.) ry.	Total income.	Percentage of total income on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.	
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.		
1895 . . .	21,49,141	Adjustments under the Cripps' award were brought into account in 1901, but in these statistics they have been adjusted and allocated to the proper years.
1896 . . .	1,30,67,048	...	...	...	...	...	...	...	...
1897 . . .	1,09,68,812	1,61,038	77,298	0.39	19,942	97,240	0.49	52	52.00	
1898 . . .	2,23,63,921	16,29,122	7,81,978	3.49	...	7,81,978	3.49	74	52.00	
1899 . . .	2,26,68,262	16,11,010	7,73,285	3.41	17,314	7,90,600	3.49	73	52.00	
1900 . . .	2,26,57,963	16,36,289	7,89,360	3.48	3,562	7,92,922	3.50	74	52.00	
1901 . . .	2,25,70,734	24,56,333	11,98,240	5.31	...	11,98,240	5.31	113	52.00	
1902 . . .	2,27,93,660	19,41,541	9,31,910	4.09	...	9,31,910	4.09	88	52.00	
1903 . . .	2,28,27,906	21,39,158	10,36,296	4.54	...	10,36,296	4.54	98	52.00	
1904 . . .	2,29,47,451	27,47,442	13,18,772	5.74	...	13,18,772	5.74	124	52.00	
1905 . . .	2,30,13,696	36,10,372	17,17,379	7.50	...	17,17,379	7.50	165	52.00	
1906 . . .	2,31,30,148	41,67,050	20,00,188	8.65	...	20,00,188	8.65	183	52.00	

9(g) Southern Punjab "Ludhiana" extension (5' 6" gauge)—**Details of construction—**

The open mileage, from Ludhiana, *via* Ferozepore, to McLeod Ganj is 155.05 miles. This extension was sanctioned in 1903 and opened through in 1906.

Permanent-way.—The permanent-way consists of 75-lb. flat-footed steel rails on Australian jarrah wood sleepers.

Ballast.—The line is being ballasted chiefly with brick.

Fencing.—Only station yards, and short lengths on either side of all level crossings where gates and gate lodges have been provided, are being fenced.

Curves.—The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient is 1 in 400.

Terms of contract—

This railway is worked as a part of the Southern Punjab railway under the contracts and conditions relating to that railway [9 (f)], except as follows:—

Government aid.—Government allow the Company, by way of rebate on the net earnings of the North Western (State) railway from traffic interchanged or sent over any part of the Company's lines including the Ludhiana extension, such a sum (not exceeding the amount of such net earnings of the North Western (State) railway) as together with the net earnings of the Company in respect of the Ludhiana extension will make up interest at the rate of 5 per cent. per annum on the capital expenditure of the Company in respect of the extension as charged in the capital account.

Currency of contract.—Concurrent with the contract contained in the Principal Indenture. If determined by notice of purchase on 31st December 1923, or at the expiration of any subsequent period of ten years, there shall be paid to the Company a sum equal to twenty-five years' purchase of the average of the Company's share of the net earnings of the extension during the five years immediately preceding such 31st December, subject to a maximum limit of 20 per cent. of the total capital expenditure on the extension and a minimum of the total sterling capital expenditure of the extension; if determined by notice of purchase on 31st December 1948 then the total amount of such capital expenditure as aforesaid in sterling.

Terms of working.—Surplus profits in excess of 5 per cent. per annum on the total capital expenditure are divisible at the close of each year between the Company and the Secretary of State in the proportion of one-fourth to the former and three-fourths to the latter.

Statistics of working—

TABLE I.								TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Rebate from North Western (State) railway.	Total income.	Per cent. of total income on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1905 . . .	70,09,669	73,332	35,200	0.50	10,500	45,700	0.65	68	52.00
1906 . . .	79,33,781	6,29,557	3,02,187	3.81	33,318	3,35,505	4.23	83	52.00

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 9}_{Sub-heads (a) to (l)} NORTH WESTERN (STATE) RAILWAY SYSTEM—contd.

9(h) Khushalgarh-Kohat-Thal railway (2' 6" gauge)—

Details of construction—

The line is 91·73 miles long. Its construction was sanctioned in 1900 and it was opened through in 1903.

Permanent-way.—The permanent-way between Khushalgarh and Kohat consists of flat-footed steel rails, 35 lbs. to the yard, laid on wooden sleepers; the Kohat-Thal section is laid partly with 25-lb. and partly with 21-lb. rails, partly on wooden and partly on steel sleepers.

Ballast.—The line is ballasted throughout with broken stone.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 239 foot radius.

Gradients.—The ruling gradient between Khushalgarh and Kohat is 1 in 83·3 and between Kohat and Thal 1 in 100.

Terms of contract.—The line is owned and worked by the State.

Statistics of working—

TABLE I.	TABLE II.		
	Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.
Included with the North Western (State) railway }	1902	Rs. 31	67·88
	1903	31	174·56
	1904	84	223·38
	1905	38	166·36
	1906	50	143·68

9(i) Nowshera-Durgai railway (2' 6" gauge)—

Details of construction—

This railway is 40·25 miles in length. Its construction was sanctioned in 1899 and it was opened through in 1901.

Permanent-way.—The permanent-way consists of 35-lb. flat-footed steel rails laid partly on wooden and partly on steel sleepers.

Ballast.—The line is ballasted throughout with broken stone.

Fencing.—The line is unfenced.

Curves.—The sharpest curve has a radius of 477 feet.

Gradients.—The ruling gradient is 1 in 100.

Terms of contract.—The railway is owned and worked by the State.

Statistics of working—

TABLE I.	TABLE II.		
	Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.
Included with the North Western (State) railway }	1902	Rs. 51	152·27
	1903	53	101·67
	1904	69	97·29
	1905	68	108·17
	1906	72	92·46

9(j) Dandot Light railway (2' 0" gauge)—

The Dandot Light railway has been constructed by the North Western (State) railway to develop the Dandot colliery, which is worked primarily for the benefit of the railway. The section from Dandot to the mouth of the main mine consists chiefly of two inclines worked with steel wire ropes by combined gravity and steam power. On the second portion (1·29 miles) there is another incline worked by gravity alone.

Details of construction—

The line is 0·18 miles long. The section from Dandot station to the mouth of the main mine was opened in 1889.

Permanent-way.—The permanent-way consists of old metre gauge 36-lb. and 40-lb. rails laid on deodar sleepers.

Ballast.—The line is ballasted throughout with broken stone.

Fencing.—The line is unfenced.

Curves.—One semi-circular curve of a radius of 75 feet is used to enable the line to turn on itself.

Terms of contract.—The line is owned and worked by the State.

Statistics of working.—Included with the North Western (State) railway.

[For Index see page 112.]

9(7) Jullundur-Kapurthalla-Sultanpur (British section)—.

9(7) Jullundur-Kapurthalla-Sultanpur (Native State section)—

Number Main head 10
Sub heads (a) to (c). **ODDH AND ROHILKHAND (STATE) RAILWAY SYSTEM—**

	£	Open line.	Under construction or sanctioned for construc- tion.	Total.
	Miles.	Miles.	Miles.	
(a) Oudh and Rohilkhand (State) railway { 5' 6" gauge)	1,210·75	99·15	1,309·90	
{ 3' 3½" gauge }	1·81	...	1·81	
(b) Hardwar-Dohra railway (5' 6" gauge)	32·04	...	32·04	
(c) Cawnpore-Burhwal link (3' 3½" gauge)	79·60	...	79·60	
Total	1,324·20	99·15	1,423·35	

Home line over Foreign line :—

Foreign lines over Home line.—

Bengal and North-Western railway,	Cawnpore to Arrahbuzh, 45.63 miles, and Dahnanzj to Barhwal	} for passenger and goods trains.	79.00
	34.57 miles (Cawnpore-Barhwal link 3' 3" gauge)		1.81
" " " "	Bear's Cantonment to Puna City (Oudh and Rohilkhand State railway, 3' 3" gauge)		81.41

The Oudh and Rohilkhand railway was acquired by the State from the late Guaranteed Company on the 1st January 1889.

Details of construction.

First sanction to construction was given in 1864. The main line *via* Rai Bareilly was opened through in 1898. The Benares-Lucknow loop was opened through in 1874 and the Bareilly-Moradabad loop in 1873.

Permanent-way—The main line and Benares-Lucknow loop are laid throughout with 75-lb. flat-footed steel rails. So are most of the branches, although some 60-lb. flat-footed steel rails are still to be found in a few of the branches, e.g., the Aligarh branch and in a portion of the Barilly-Moradabad loop. There are also a few miles of 60-lb. flat-footed iron rails in the Bahraughat and Madhogauj branches.

The sleepers are of the following types :—stamped steel bowls, cast-iron pots, steel trough transverse and wood (sal, deodar, jarrah and New South Wales hard wood). There are a few wrought iron saddle back sleepers in the Kotdwar branch and Bareilly-Moradabad loop.

Ballast.—The main line is ballasted throughout with kunkur, stone, or shingle.

The branches are ballasted either with sand or earth with a covering of broken brick, kunkur or stone, except the Allahabad, Delhi, Cawnpore and Hardwar branches which are ballasted with kunkur, stone or shingle.

Fencing.—The line is fenced throughout with the exception of the Madhoganj, Meerut and Kotdwara branches.

Curves.—The sharpest curve on the line is of 1,000 feet radius.

Gradients.—The ruling gradient of the whole of the railway is 1 in 400.

Nil. The railway is owned and worked by the State.

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 10} ^{Sub-heads (a) to (c)} **ODDH AND ROHILKHAND (STATE) RAILWAY SYSTEM—contd.**

10 (a) Oudd and Rohilkhand (State) railway proper (5' 6" gauge)—*concl'd.*

Statistics of working—

TABLE I.								TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Surplus profits paid to Company.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1867	...	...	...	...	...	...	...	74	106.97
1868	...	...	...	...	...	...	...	120	64.54
1869	...	...	...	...	...	...	...	97	81.74
1870	...	...	...	...	...	...	...	112	227.93
1871	...	...	...	...	...	...	...	117	69.31
1872	...	...	...	...	...	...	...	56	68.58
1873	...	...	...	...	...	...	...	56	72.91
1874	...	...	...	...	...	...	...	72	64.41
1875	...	...	...	...	...	...	...	97	59.71
1876	...	...	...	...	...	...	...	120	63.38
1877	...	...	...	...	...	...	...	153	52.38
1878	...	...	...	...	...	...	...	163	54.23
1879	5,86,35,774	42,11,943	18,19,936	3.11	28,60,000	...	-9,80,064	153	58.11
1880	6,02,21,081	41,77,159	19,01,409	3.16	28,19,946	...	-9,15,537	157	57.25
1881	6,25,30,935	40,38,750	19,75,690	3.16	29,14,137	...	-9,38,438	173	59.91
1882	6,52,73,849	51,29,514	18,01,371	2.76	30,67,622	...	-12,66,251	185	65.77
1883	7,07,09,416	51,56,255	21,86,362	3.50	31,25,495	...	-6,55,133	192	74.54
1884	7,91,13,383	54,75,198	23,36,116	2.94	41,14,867	...	-17,88,441	182	55.99
1885	8,54,34,426	73,87,669	17,95,361	2.10	46,53,333	...	-28,57,972	176	65.50
1886	8,95,12,775	65,65,103	28,00,755	3.25	51,88,014	...	-23,37,259	180	56.02
1887	9,17,06,668	66,16,213	31,75,219	3.42	53,98,339	...	-22,63,690	186	52.83
1888	9,48,41,649	70,77,053	30,16,605	3.28	51,67,194	...	-21,51,499	197	57.38
1889	9,82,32,236	75,92,583	12,04,076	4.56	49,71,898	...	-7,67,822	209	44.24
1890	9,27,89,480	73,81,306	37,51,475	4.05	44,23,109	...	-6,68,631	205	49.14
1891	9,28,38,378	87,64,209	40,42,458	5.32	47,25,666	...	+2,16,792	238	42.29
1892	10,31,95,085	85,42,836	50,16,249	4.84	52,79,411	...	-2,63,062	237	41.28
1893	10,09,17,292	87,15,926	50,17,053	4.97	55,01,058	...	-4,84,005	239	42.44
1894	10,28,71,184	1,06,18,836	57,36,138	5.58	63,11,123	...	-5,74,945	262	45.47
1895	10,65,65,148	1,02,84,880	52,57,918	4.93	63,69,949	...	-11,14,001	248	48.95
1896	10,92,69,485	86,97,076	43,56,607	3.98	61,30,799	...	-17,79,822	200	49.97
1897	11,11,19,779	85,15,853	36,06,774	3.23	59,77,186	...	-22,80,708	186	56.89
1898	11,64,99,214	98,31,799	53,05,727	4.56	58,76,247	...	-5,68,520	190	46.12
1899	12,21,84,123	1,11,36,960	60,76,495	4.97	59,75,292	...	+1,01,303	208	46.45
1900	12,55,91,869	1,15,15,192	55,91,727	4.45	62,24,185	...	-6,36,458	208	51.44
1901	12,87,66,835	1,22,51,991	72,20,607	5.60	63,12,014	...	+9,07,963	231	45.53
1902	13,69,17,957	1,31,65,792	61,11,326	4.70	64,74,905	...	-64,569	230	51.50
1903	14,32,62,379	1,39,49,322	74,31,862	4.8	68,00,305	...	+4,31,557	226	48.16
1904	14,96,63,924	1,51,96,264	71,31,117	4.76	70,55,640	...	+77,477	235	53.37
1905	15,37,92,909	1,53,85,913	63,43,667	4.12	71,68,431	...	-8,24,764	238	58.77
1906	15,71,99,731	1,64,67,329	78,15,731	4.97	75,66,010	...	+2,49,721	249	52.54

10 (b) Hardwar-Dehra railway (5' 6" gauge)—

Details of construction—

This railway is 32.04 miles long. Its construction was sanctioned in 1896 and it was opened in 1900.

Permanent-way.—The permanent-way consists of 75-lb. flat-footed I. S. R. steel rails on deodar and sal sleepers.

Ballast.—The line is ballasted throughout with shingle, with a covering of broken stone for boxing.

Fencing.—The line is fenced throughout.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 75.

Terms of contract—

The Hardwar-Dehra railway is worked under the following contract :—

Contract of—26th March 1897 (between the Secretary of State and the Hardwar-Dehra Railway Company) for construction and working.

The general conditions of the contract are as follows :—

Government aid.—Interest at 3 per cent. per annum is guaranteed. Government also allow Rs. 3,600 for office and management expenses in any year in which the minimum dividend of 3 per cent. is not received by the Company from the earnings of the line, and pay all legal expenses properly debitable to revenue. Land is also provided free of charge.

Terms of contract.—The Hardwar-Dehra Railway Company is authorised to raise 30 lakhs of rupees as capital and, except for *bonâ fide* temporary purposes at a reasonable rate of interest, the Company cannot, without the sanction of Government or the working agency, increase its share or stock capital.

Currency of contract.—Government may determine the contract, on twelve months' notice either on the 31st December 1910 or at the expiration of any subsequent period of ten years, by paying a sum equal to 25 times the average yearly net earnings during the three years prior to determination, provided the payment does not exceed by more than 20 per cent., or is not less than, the total capital expenditure.

Power of Company to surrender contract.—Nil.

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APPENDIX 38—contd.

History of railways constructed and in progress.

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Number ^{Main head 10} _{Sub-heads (a) to (r)} **ODDH AND ROHILKHAND (STATE) RAILWAY SYSTEM—concl'd.**

10 (b) Hardwar-Dehra railway (5' 6" gauge)—concl'd.

Terms of contract—concl'd.

Terms of working.—After deduction of 50 per cent. of the gross earnings for working expenses (which may include any single item of capital expenditure, not exceeding Rs. 1,000, classed as a 'Minor Work', subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year) and repayment to Government of the interest paid by Government under the contract and attributable to each half-year, the residue, if any, at the end of the year to be divided in equal proportions between the Government and the Company.

Rates and fares.—Rates and fares to be arranged between Government and the working agency within one-and-half times the maximum and minimum rates and fares in force on the Oudh and Rohilkhand (State) railway.

Statistics of working—

TABLE I.								TABLE II.		REMARKS.
Calendar year	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest	Company's share of net earnings	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.	
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.		
1897 . .	1,96,617	Interest up to 1900 was charged to capital and net earnings of 1900 were credited to capital in reduction of interest charges.
1898 . .	10,70,315	..	..	..	..	..	..	..	..
1899 . .	28,42,687	..	..	..	..	..	..	..	..
1900 . .	25,07,093	1,60,185	80,213	1.13	..	..	..	115	50.00
1901 . .	23,12,301	2,13,456	1,06,728	3.50	81,920	..	+22,508	128	50.00	
1902 . .	28,76,486	2,52,485	1,26,342	4.45	85,618	11,532	+29,941	152	50.00	
1903 . .	28,11,512	2,62,719	1,31,359	4.62	85,260	20,797	+25,562	158	50.00	
1904 . .	29,12,592	2,63,612	1,31,806	4.52	86,777	23,050	+21,979	153	50.00	
1905 . .	29,20,670	3,13,476	1,56,738	5.37	86,000	22,515	+46,633	188	50.00	
1906 . .	29,21,254	3,31,110	1,67,055	5.71	87,688	29,663	+39,684	201	50.00	

10 (c) Cawnpore-Burhwal (3' 3½" gauge) link—

The construction of the Cawnpore-Burhwal (3' 3½" gauge) link was sanctioned as a part of the project for linking up the 3' 3½" gauge systems of Northern India.

Details of construction—

The link is 79.60 miles long. Its construction was sanctioned in 1894 and it was opened through in 1897.

Permanent-way.—Where the line is not mixed gauge it is laid with new 50-lb. steel rails on cedar sleepers.

Ballast.—The line is ballasted throughout with Lunkur, stone, or shingle.

Fencing.—The line is fenced throughout.

Curves.—The sharpest curve has a radius of 573 feet.

Gradients.—The ruling gradient is 1 in 400.

Terms of contract—

The line is owned by the State. The Bengal and North-Western Railway Company exercises running powers over it under an agreement with the Oudh and Rohilkhand (State) railway, dated the 21st February 1902, which provides that the Company will haul its trains and traffic over the link and pay to the Oudh and Rohilkhand (State) railway 80 per cent., which has, with effect from the 1st July 1905, been reduced to 75 per cent., of the gross receipts arising therefrom.

Statistics of working—

Included with the Oudh and Rohilkhand (State) railway [10 (a)].

Number ^{Main head 11} _{Sub-head (a)} **ASSAM-BENGAL RAILWAY (3' 3½" gauge)—**

Chairman.—Lieutenant-General Sir Richard Strachey, R.E., G.C.S.I.

Managing Director.—James Meadows Rendel, Esq.

Offices.—Bishopsgate House, Bishopsgate Street within London, E. C.

The construction of the Assam-Bengal railway as a State line was sanctioned in May 1891. The Assam-Bengal Railway Company was formed in England in April 1892 and took over the works commenced by the State. The late Noakhali (Bengal) railway, 34.90 miles which was worked by the Assam-Bengal Railway Company up to the end of 1905, was purchased by Government and amalgamated with the Assam-Bengal railway from the 1st January 1906.

Details of construction—

The total open mileage of the line is 775.28 miles, which may be divided into (1) main line (Chittagong to Tinsukia), 576.61 miles, and (2) branches, 198.67 miles. The main line was opened through to Tinsukia in 1903.

Besides the above 35 miles were sanctioned for construction, of which 19 miles are actually under construction.

Permanent-way.—The line is laid with 50-lb. flat-footed steel rails, partly on sal and pyinkado, and partly on bastard sal, nageshur and jarrah wood sleepers. The Noakhali branch is laid with 4½ lb steel rails on sal sleepers.

Ballast.—The ballast consists of broken brick, stone and laterite. The whole line has not yet been ballasted.

Fencing.—The line is fenced between Chittagong Port and Silchar, Laksam and Chandpur, Gaubati Ghat and Gaubati, and half a mile from Gaubati towards Lumding, and at some stations on the hill section.

APPENDIX 38—contd.

History of railways constructed and in progress.

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Number ^{Main head 11} _{Sub-head (a)} . . . ASSAM-BENGAL RAILWAY (3' 3½" gauge)—contd.

Details of construction—concl'd.

Curves.—The sharpest curve is of 358 feet radius.

Gradients.—The ruling gradient between Chittagong and Badarpur is 1 in 150; between Badarpur and Lumding 1 in 60, with a 1 in 37 banking section 8½ miles long; between Gauhati and Tinsukia, 1 in 100; between Laksam and Noakhali, 1 in 200; between Laksam and Chandpur, 1 in 300; between Badarpur and Silchar, 1 in 150.

Terms of contracts—

The Assam-Bengal railway is worked under the following contracts:—

Contracts of—26th April 1892 (between the Secretary of State and the Assam-Bengal Railway Company) for construction and working.

—11th April 1906 (between the Secretary of State and the Assam-Bengal Railway Company)—supplemental to the contract of the 26th April 1892—for the acquisition by the Company of the Noakhali (Bengal) railway for the purpose, and as a part, of their undertaking, and for the application thereto, as from 1st January 1906, of the provisions of the principal contract of the 26th April 1892.

The general conditions of the contract are:—

Government aid.—Government guarantee interest in sterling at 3 per cent. on the Company's share capital of £1,500,000. Up to 30th June 1898 interest was allowed at 3½ per cent. Land was provided free of charge.

Terms of contract.—The contract provides that the Company raises £1,500,000, and that any further money required be supplied either by the Government or raised by the Company under guarantee. Subject to the provisions of the contract, all land and everything constructed or to be constructed thereon, and generally all property, whether real or personal, (with the exception of monies paid against interest on the Company's share capital and sums applied from net earnings) are the property of Government, but are subject to use and enjoyment by the Company during the continuance of the contract.

Currency of contract.—Government may determine the contract, by giving the Company in England 12 months' previous notice, on the 31st December 1921 or at the end of any succeeding 10th year. Government may also determine the contract at any time, on six months' notice, if the Company fails to fulfil its obligations or the line is worked at a loss for not less than three half-years consecutively. On the determination of the contract the Company is to hand over to Government the railway and all its belongings of every description, on repayment of the amount of the par value of the share capital paid by the Company to Government.

Power of Company to surrender contract.—Nil.

Terms of working.—After deducting working expenses (which include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year, and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) the net earnings to be applied in payment of—

(1) Contribution due to the Provident Fund, calculated at one per cent. of net earnings.

(2) The equivalent in rupees of interest paid on debenture capital; provided that if the Company's share capital is not less than ⅓ths of the total capital expenditure, the rate of interest recovered under this sub-head (on debentures issued previous to the 30th June 1898) shall not exceed the rate for the time being applicable to the Company's share capital.

(3) The equivalent in rupees of guaranteed interest paid to the Company in respect of share capital; interest on the capital contributed or deemed to be contributed by Government, at the same rate as the guarantee for the time being on the Company's capital. But if the Government capital exceeds ⅓ths of the total capital expenditure for the time being, the rate of interest on the amount of the excess to be subject to agreement; and the residue is divisible between Government and the Company in the ratio of their respective capital expenditure.

Rates and fares.—Certain maxima and minima have been fixed within which the Company is permitted to vary its rates.

Statistics of working—

TABLE I.							TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1891	1,53,203	...	...	...	...	...	...	...
1892	80,16,133	...	...	...	2,66,378	—2,66,378	...	...
1893	1,07,68,192	...	...	...	7,09,987	—7,09,987	...	...
1894	2,46,89,898	...	...	...	8,76,954	—8,76,954	...	...
1895	4,04,38,298	2,14,426	—8,047	...	18,95,686	—14,03,688	64	183.75
1896	5,21,39,804	6,18,785	33,238	0.06	23,73,034	—23,89,798	71	94.63
1897	6,37,67,401	9,90,840	72,214	0.11	22,56,279	—21,84,065	68	93.71
1898	7,56,41,721	13,06,124	54,551	0.07	24,45,275	—23,90,724	86	95.83
1899	8,99,56,236	16,18,646	3,23,704	0.37	25,68,094	—25,40,380	75	80.08
1900	9,56,01,772	17,09,953	3,64,364	0.38	33,31,390	—29,67,026	75	78.69
1901	10,41,49,467	21,34,252	4,56,654	0.44	35,06,252	—30,49,598	70	78.60
1902	11,11,34,922	20,96,058	2,54,418	0.23	38,08,887	—35,53,969	68	87.86
1903	12,40,28,549	23,97,658	4,43,963	0.36	40,71,450	—36,27,487	72	80.51
1904	12,60,09,689	29,53,962	1,05,390	0.08	41,66,385	—40,61,145	77	94.78
1905	12,78,57,542	34,14,295	1,25,615	0.10	42,61,306	—41,35,691	88	94.68
1906	13,35,30,704	42,30,064	4,27,858	0.32	44,58,917	—40,30,059	104	89.86

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 112.]

Number Main head 11 Sub-head (a) **ASSAM-BENGAL RAILWAY (3' 3½" gauge)—*concl'd.***

Statistics of working—*concl'd.*

Noakhali (Bengal) railway (3' 3½" gauge)—

TABLE I.							TABLE II.		
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent on capital outlay.	Rebate from Assam-Bengal railway.	Total income.	Per cent. of total income on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1903 . . .	21,04,827	30,699	2,409	0.11	23,389	25,798	1.23	30	92.00
1904 . . .	21,59,851	55,849	—5,222		50,775	47,543	2.20	31	105.79
1905 . . .	21,35,228	68,493	1,666	0.08	50,000	57,721	2.71	38	97.57
1906 . . .		Amalgamated with the Assam-Bengal railway							

Number Main head 12 Sub-heads (a) & (b) **BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—**

Chairman.—Colonel T. Gravey, R.E., C.S.I.*Managing Director.*—Alexander Izat, Esq., C.I.E., M. Inst. C. E.*Offices.*—237, Gresham House, Old Broad Street, London, E. C.

Lines comprising the system—The Bengal and North-Western railway system is made up of—

	Open line.	Under construction, or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(a) Bengal and North-Western railway (3' 3½" gauge)	932.18	142.46	1,074.64
(b) Tirhoot railway (3' 3½" gauge)	614.70	154.06	778.76
Total	1,546.88	306.52	1,853.00

Running powers—*Home line over Foreign line—*

Cawnpore to Aishabari, Cawnpore-Burhwal (3' 3½" gauge) link, Oudh and Rohilkhand (State) railway	for passenger and goods trains	Miles.
Aishabari to Dabhoi, Lucknow-Bareilly railway		45.03
Dabhoi to Burhwal, Cawnpore-Burhwal (3' 3½" gauge) link, Oudh and Rohilkhand (State) railway		3.40
Benares Cantonment to Benares City, Oudh and Rohilkhand (State) railway		34.57
Total		84.81

12 (a) Bengal and North-Western railway proper (3' 3½" gauge)—**Details of construction—**

The total open mileage of the railway is 932.18 miles.

This may be divided into (1) main line (Sonapore to Ajdhya) 237.09 miles; (2) loop line (Sonapore to Bunwar-chak) 9.34 miles; and (3) branches, 685.75 miles. The construction of the main line was sanctioned in 1882 and it was opened through in 1885.

Besides the above there were 82.67 miles under construction, *viz.*, Dharonda to Maharajganj, 3.90 miles, Gorakhpur to Bagaha, 60.94 miles, and Savan to Thawe, 17.83 miles; and 59.79 miles, Burhwal to Sitapur, sanctioned for construction but not commenced.*Permanent-way.*—The main line between Sonapore and Burhwal is laid with 50-lb. steel rails on sāl sleepers. The rest of the line north of the Gogra is laid with 41½-lb. steel rails mostly on sāl sleepers. The Ganges-Gogra Doab lines are laid with 50-lb. steel rails on sāl sleepers with the exception of the Mau-Aunrihar section which is laid with 41½-lb. steel rails.*Ballast.*—The whole line, except quite new constructions, is ballasted with kunkur or broken brick.*Fencing.*—The main line is fenced.*Curves.*—The sharpest curve is of 900 feet radius.*Gradients.*—The ruling gradient is 1 in 300. On the various ghat lines the gradients are steeper.**Terms of contracts—**

The Bengal and North-Western and Tirhoot railways are worked under the following contracts:—

Contracts of—12th December 1882.—Bengal and North-Western Railway Company's principal contract.

22nd February 1886.—Contract modifying that of 1882.

19th December 1894.—Contract, supplemental to those of 1882 and 1886, providing for the Revelganj, Bahramghat, Burhwal, Tulsipur, Katarnian Ghat and Turtipur branches of the Company's railway, and for the exercise of running powers over the Cawnpore-Burhwal (3' 3½" gauge) link.

23rd July 1896.—Contract, supplemental to those of 1882, 1886 and 1894, providing for the Ganges-Gogra Doab lines of the Company's railway, known as the Ganges-Gogra Doab contract.

15th January 1903.—Supplemental contract for the Ghazipur-Ballia, Azamgarh-Shahganj and Aunrihar-Jaunpur lines.

21st April 1903.—Supplemental contract regarding rate of exchange.

14th December 1905.—Contract, supplemental to that of 1882, regarding the date on which the Secretary of State may exercise his right to purchase the Company's line and the period at which he may fix the purchase price, and revising the terms on which the Tirhoot railway will continue to be worked by the Bengal and North Western Railway Company after the expiration, on the 31st December 1904, of the contract of 1890.

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 12} _{Sub-heads (a) & (b)} BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—contd.

12 (a) Bengal and North-Western railway proper (3' 3½" gauge)—concl'd.

Terms of contracts—concl'd.

The general conditions of the contracts are as follows:—

Government aid.—Land alone was provided free.

Currency of contracts.—(1) *Bengal and North-Western railway contracts.*—The contracts of 1882, 1886 and 1894, viz., those for the working of the Bengal and North-Western railway proper, terminate by effluxion of time on the 31st December 1981, when the line and all its appurtenances become the property of Government by payment to the Company of the value of the rolling-stock, movable machinery, stores, etc. Government may, however, determine the contract on the 31st December 1912 or on the 31st December 1932, on one year's previous notice of intention to purchase, paying 25 times the average net earnings (after deducting from such net earnings the share of surplus profits over 6 per cent. to which Government would have been entitled under the contract of 12th December 1882) for the five years preceding the purchase. Government may also determine the contract at any time, on six months' notice, if the Company fails to observe its obligations, on paying the value of rolling-stock, stores, etc., and fair value of line and fixed machinery and plant, less value of latter treated as a reversionary sum absolutely payable on the 31st December 1981.

(2) *Ganges-Gogra Doab contract.*—The contract of 1896, viz., that covering the Ganges-Gogra Doab lines, runs concurrently with those of 1882, 1886 and 1894, as does also the supplemental contract of 1903; but, in the event of Government exercising the right of purchase in 1912 or 1932, the amount to be paid is the actual outlay on the line, as shown in sterling, appearing in the capital account.

Note.—Government relinquished their right to acquire the Company's line on the 31st December 1912, on the condition that they shall have the power to fix in 1912 the purchase price of the Bengal and North-Western railway and to purchase the line at that price on the 31st December 1932.

(3) *Tirhoot railway contract.*—The contract of 1890, for working the Tirhoot railway, terminated on the 31st December 1901, and the revised contract under which the railway continues to be worked by the Company came into force on and from the 1st January 1905 and is current until the 31st December 1932, subject to the proviso that the Secretary of State may, if he should think it desirable, terminate it in 1919 or modify it at that date in such manner as he may think fit.

Power of Company to surrender contracts.—Nil.*Terms of working.*—The gross earnings of the State and Company's sections to be kept entirely separate.

All charges for maintenance of way, works and stations, other than those for general supervision, to be allocated to each section on the basis of actual outlay on that section, all other working expenses being divided between the two sections in proportion to the gross earnings of each.

4 per cent. on respective outlay on "rolling stock," "steamers, barges and landing stages," "stores," "station, station machinery and staff quarters at Sonapore" for "joint use," and future expenditure on "workshops," to be charged to working expenses in addition to ordinary working expenses and contribution to Provident Fund, for apportionment to the State and Company's sections, in the ratio of their respective gross earnings. This amount of interest to be credited to the respective Revenue Accounts in the ratio of contributions of capital to the joint accounts.

Government to first receive out of the Tirhoot railway net earnings of each year 5 per cent. on all capital expended on the Tirhoot line open for traffic, including expenditure subsequent to 31st December 1904.

The residue of net earnings to be dealt with as follows:—

(a) if the residue does not exceed ten lakhs, ½th to Government and ½th to the Company;

(b) if the residue exceeds 10 lakhs, the sum of 10 lakhs shall be divided as in condition (a) and the excess over 10 lakhs shall belong ¼th to Government and ¾th to the Company.

Rates and fares.—On the Company's section the Company may, with the approval of Government, fix rates and fares. On the Tirhoot section certain maxima and minima have been fixed, within which the Company is permitted to vary rates.

Statistics of working—

TABLE I.							TABLE II. Including the Tirhoot railway from 1890.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Payments received for working the Tirhoot Railway.	Total income.	Percentage on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.	Rs.	Rs.		Rs.	
1884	1,52,47,428	77,070			26,221		29	133.76
1885	2,01,86,980	12,05,320			6,10,799	3.03	72	49.82
1886	2,36,16,102	18,51,074			8,09,180	3.43	106	56.36
1887	2,56,22,684	19,44,062			8,37,044	3.27	90	56.94
1888	2,61,51,503	22,09,543			9,58,844	3.78	103	55.25
1889	2,68,41,872	22,11,824			10,57,964	4.00	103	52.35
1890	2,57,91,904	22,18,615			12,32,397	4.76	121	44.08
1891	2,76,68,842	24,76,909	15,54,509	69,444	10,20,993	5.87	131	40.04
1892	2,83,88,821	23,39,077	16,84,194	67,660	17,01,254	5.99	129	41.12
1893	2,84,84,234	26,14,546	15,81,860	66,842	16,48,702	5.79	123	43.20
1894	2,87,24,887	26,17,242	16,05,265	72,358	17,67,623	6.15	130	41.79
1895	3,12,95,704	25,71,026	16,82,766	72,909	17,56,675	5.61	133	42.45
1896	3,43,36,114	26,26,033	16,70,172	71,614	17,41,786	5.07	134	47.97
1897	4,10,32,207	27,55,718	17,24,277	74,905	17,99,182	4.38	128	43.78
1898	4,66,78,822	33,31,800	19,74,020	75,885	20,50,805	4.39	129	43.37
1899	5,16,06,783	43,44,861	26,70,911	61,940	27,32,851	5.30	131	46.67
1900	5,24,73,019	44,56,583	24,79,433	49,563	25,28,996	4.82	128	43.56
1901	5,50,91,830	53,66,794	30,97,372	76,853	31,74,225	5.76	140	44.51
1902	5,84,82,525	55,60,238	29,72,183	76,671	30,40,854	5.91	154	46.22
1903	6,21,09,547	61,98,433	38,53,972	1,04,369	39,58,341	6.47	161	40.64
1904	6,43,92,183	67,16,933	43,28,496	1,16,824	44,45,330	6.90	168	39.68
1905	6,77,55,568	61,79,116	34,72,017	1,69,446	36,41,463	5.87	151	43.11
1906	7,13,66,623	77,02,976	40,92,699	1,92,032	42,81,731	6.00	163	47.39

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 12 Sub-heads (a) & (b) BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—contd.

12 (b) Tirhoot railway (3' 3½" gauge)—

Details of construction—

The open mileage of this railway is 614.30 miles, consisting of (1) main line (Semaria Ghat to Bettiah and Samastipur to Khanwa Ghat), 242.58 miles, and (2) branches, 371.72 miles. Of the above 9.47 miles are double line. First sanction to the construction of the main line was accorded in 1871 and it was opened throughout in 1890. There were in addition 164.06 miles under construction.

Permanent-way—The following types of rails are in use:—50-lb. flat-footed steel, 41½-lb. flat-footed steel and 60-lb. iron. The sleepers are of sal, pyinkado, jarrah and cast iron of Denham-Olpherts' pattern.

Ballast—The line, except quite new constructions, is ballasted with kunkur or broken brick.

Fencing—The main line is fenced with stone posts and 4 wires.

Curves—The sharpest curve, which is on the main line, is of 1,500 feet radius.

Gradients—The ruling gradient is 1 in 300, except between Samastipur and Khanwa Ghat on which 3.42 miles are on a gradient of 1 in 200. On various river ghat lines the gradients are steeper.

Terms of contracts—See under Bengal and North-Western railway proper, 12 (a).

Statistics of working—

TABLE I.									TABLE II.		REMARKS.
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Payment made to the Bengal and North-Western Railway Company for working the line.	Total income.	Percentage of total income on capital outlay.	Interest.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.	
	Rs.	Rs.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.		
1875	...	...	...	...	...	...	...	...	39	107.62	
1876	...	...	...	...	...	...	...	...	71	68.67	
1877	...	...	...	...	...	...	...	...	77	69.85	
1878	...	...	...	...	...	...	...	...	108	75.34	
1879	59,38,320	4,58,733	Information not available.	Information not available.	1,07,519	2.02	2,37,411	-1,29,592	113	76.49	
1880	56,13,274	5,51,068	Information not available.	Information not available.	2,33,692	4.16	2,50,659	-16,997	102	56.40	
1881	72,02,917	5,41,255	Information not available.	Information not available.	2,36,200	3.23	2,67,245	-31,045	110	59.57	
1882	1,07,92,877	6,60,022	Information not available.	Information not available.	2,54,047	2.36	3,86,612	-1,32,565	136	61.50	
1883	1,32,83,024	8,92,141	Information not available.	Information not available.	2,59,705	1.96	4,99,014	-2,39,309	103	70.90	
1884	1,48,64,982	11,90,073	Information not available.	Information not available.	2,66,582	1.79	5,74,369	-3,07,787	105	77.60	
1885	1,44,47,916	12,78,634	Information not available.	Information not available.	3,59,269	2.49	5,86,195	-2,26,926	98	71.90	
1886	1,54,33,549	11,94,638	Information not available.	Information not available.	5,01,180	3.25	6,30,944	-1,29,755	109	66.56	
1887	1,97,49,195	17,22,955	Information not available.	Information not available.	6,95,725	3.52	7,79,801	-84,076	122	59.62	
1888	2,07,78,252	18,07,283	Information not available.	Information not available.	7,08,875	3.85	8,17,485	-18,610	123	55.80	
1889	2,12,28,094	18,96,674	Information not available.	Information not available.	9,78,246	4.61	8,41,932	+1,36,314	127	48.42	
1890	2,29,94,165	23,92,977	11,23,332	69,484	13,21,797	5.75	9,14,207	+4,07,590	...	...
1891	2,34,99,148	21,89,279	12,82,875	67,060	13,33,818	5.76	9,34,385	+4,19,463	...	...
1892	2,43,25,804	21,84,862	14,09,975	66,842	13,18,115	5.41	9,50,025	+3,65,790	...	...
1893	2,49,08,843	26,81,190	15,35,381	72,358	13,63,223	5.85	10,01,205	+3,41,928	...	...
1894	2,50,08,061	29,12,305	15,61,276	72,909	14,88,367	5.81	9,98,383	+4,64,835	...	...
1895	2,56,02,092	30,89,644	15,61,172	71,614	14,85,370	5.70	10,18,013	+4,70,354	...	...
1896	2,60,38,655	31,61,172	16,29,812	74,905	15,51,907	5.00	10,27,821	+4,57,509	...	...
1897	3,11,00,098	32,38,109	16,67,068	75,885	15,91,184	4.59	10,33,630	+5,16,277	...	...
1898	3,46,43,176	31,41,140	14,42,101	61,910	13,80,161	3.63	13,18,764	+2,72,419	...	...
1899	3,80,27,533	34,24,808	15,66,413	49,563	15,16,870	3.53	14,62,603	-82,442	...	...
1900	4,30,15,249	36,47,197	22,75,660	76,853	21,98,807	4.76	16,19,281	-1,02,381	...	...
1901	4,61,91,293	43,16,760	24,55,201	76,671	22,78,530	4.84	17,67,789	+4,31,008	...	...
1902	4,91,41,200	45,50,632	31,92,619	1,04,369	30,88,250	6.07	18,77,205	+5,01,325	...	...
1903	5,08,63,468	56,72,952	34,98,567	1,16,834	33,81,733	5.99	19,86,515	+11,01,735	...	...
1904	5,64,95,579	62,63,114	35,57,423	1,69,446	33,87,977	5.45	21,48,921	+12,33,712	...	...
1905	6,21,36,962	61,81,754	38,97,310	1,92,032	37,05,278	5.50	23,54,563	+10,88,414	...	...
1906	6,73,40,339	66,80,324	...	...	...	...	25,50,134	+11,54,844	...	...

Sagauli-Raxaul branch, before it was purchased by the State.

TABLE I.						TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.		Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.			Rs.	
1896	1,36,044	...	...	...	...	...	...
1897	6,68,783	...	...	...	...	...	...
1898	8,07,550	...	...	...	...	...	...
1899	10,81,740	5,433	...	...	...	30	40.00
1900	12,12,073	25,830	...	...	...	50	52.62
1901	10,67,014	37,192	...	...	1.27	40	63.44
1902	11,73,421	39,296	...	...	1.74	42	52.57
1903	11,16,252	43,809	...	...	1.66	51	57.61
1904 (up to 10th April)	11,16,252	18,740	...	...	0.91	74	46.08

Amalgamated with the Tirhoot railway from 11th April 1904.

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 13}_{Sub-heads (a) & (b)} **BENGAL DOOARS RAILWAY SYSTEM—***Chairman*—Colonel A. J. Filgate, R.E.*Secretary*—H. Rendel, Esq.*Offices*—271 Winchester House, 50, Old Broad Street, London, E. C.**Lines comprising the system**—The Bengal Dooars railway system is made up of—

	Open line. Miles.
(a) Bengal Dooars railway (3' 3½" gauge)	86.40
(b) Bengal Dooars railway extensions (3' 3½" gauge);	116.86
Total	152.9

The lines were constructed for opening out the Western Dooars and for the development of the tea industry.

13 (a) Bengal Dooars railway proper (3' 3½" gauge)—**Details of construction—**

The total length of open mileage is 36.40 miles, divided into main line (East Bank Teesta to Dam Dim), 31 miles, and branch, 5.40 miles. Construction was sanctioned in 1891 and the line was opened through in 1893.

Permanent-way.—The line is laid with 41½-lb. flat-footed steel rails on sal sleepers.

Ballast.—The line is ballasted throughout with stone.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 1,432.50 feet radius.

Gradients.—The ruling gradient is 1 in 166.

Terms of contracts—

The Bengal Dooars railway and the extensions are worked under the following contracts:—

Contracts of—27th April 1891.—Bengal Dooars railway principal contract.

2nd March 1898.—Contract supplemental to that of 1891 (for extensions).

27th September 1900.—Supplemental to that of 1898 (extending period of completion of Dam Dim-Bagrakote extension).

7th November 1901.—Supplemental to those of 1898 and 1900 (extending period for completion of Mal-Madaribat extension).

The general conditions of the contracts are as follows:—

Government aid.—Land free of cost from Government; and, from the District Board of Jalpaiguri, an annual subsidy of such amount not exceeding Rs. 4,000 per annum as may be required to make up the net profits of the undertaking to five per cent. per annum on the capital outlay.

Currency of contracts.—On the 31st December 1919, and thereafter at intervals of seven years, Government have power, by giving twelve months' previous notice, to terminate the contract and take over the line on payment to the Company in the case of the Bengal Dooars railway of one and two-fifths of the invested capital and capital liabilities, and in the case of the extensions of a sum equal to 25 times the average net earnings during the last preceding five years, but not exceeding by more than 20 per cent. the capital expenditure and capital liabilities of the Company and not less than the capital expended and the capital liabilities. If, at any period, the Bengal Dooars railway or the extensions should not be worked for six consecutive months, the Company can also be called upon to surrender the line and extensions on receipt of the actual sum expended up to the date of notice.

Terms of working.—If worked by the Company the whole of the profits go to the Company. If worked by the Eastern Bengal (State) railway the Secretary of State retains in each half-year 10 per cent. of the gross earnings, the remaining 60 per cent. being paid to the Company after deduction of the income-tax payable to Government.

Rates and fares—

Bengal Dooars railway and extensions from Mal to Madarihat and Dam Dim to Bagrakote—

Certain maxima and minima have been fixed subject to alteration from time to time. If the gross receipts reach 12 per cent. on the capital, Government may reduce maxima to the extent of 25 per cent., except in the case of certain special rates.

Extension from Barnes Junction to Lalmanirhat—

Certain maxima and minima have been fixed within which rates may be varied.

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 13 Sub-heads (a) and (b). **BENGAL DOOARS RAILWAY SYSTEM—concl'd.**

13 (a) Bengal Dooars railway proper (3' 3½" gauge)—concl'd.

Statistics of working—

TABLE I.								TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay	Subsidy from District Board.	Total income.	Percentage of total income on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1891	16,479	...	...	...	...	...	...	...	...
1892	12,67,626	...	...	...	...	...	...	...	...
1893	18,49,991	1,11,812	57,639	3.12	...	57,639	3.12	...	...
1894	22,84,221	2,05,286	1,04,291	4.57	4,000	1,08,291	4.74	69	49.80
1895	23,26,476	2,53,537	1,27,458	5.48	4,000	1,31,458	5.65	109	49.20
1896	24,33,213	2,70,450	1,31,813	5.42	...	1,31,813	5.42	125	49.73
1897	26,50,713	2,86,107	1,45,289	5.48	...	1,45,289	5.48	136	61.26
1898	26,68,050	2,69,089	1,10,620	4.15	4,000	1,14,620	4.30	145	49.27
1899	26,26,748	2,73,037	1,18,416	4.51	...	1,18,416	4.51	135	57.40
1900	26,42,695	3,12,731	1,89,461	7.17	...	1,89,461	7.17	137	55.41
1901	26,44,873	3,10,920	1,76,399	6.67	...	1,76,399	6.67	168	43.06
1902	26,50,627	2,73,340	1,71,155	6.47	...	1,71,155	6.47	156	43.27
1903	26,95,547	3,09,965	2,23,786	8.30	...	2,23,786	8.30	144	37.27
1904	26,64,642	3,46,277	2,56,651	9.63	...	2,56,651	9.63	156	27.80
1905	27,26,391	3,70,343	2,49,598	9.15	...	2,49,598	9.15	175	25.88
1906	27,35,098	4,08,623	2,96,703	10.86	...	2,96,703	10.86	186	32.60
								216	27.38

13 (b) Bengal Dooars railway extensions (3' 3½" gauge)—

Details of construction—

The total open mileage of the extensions is 116.56 miles, comprised of (1) Eastern extension (Mal to Madarihat), 44 miles, (2) Southern extension (Barua junction to Lalmanirhat), 65.80 miles, and (3) Western extension (Dam Dim to Bagrakote), 6.76 miles. The construction of the extensions was sanctioned in 1898 and they were opened in 1903, 1900 and 1902, respectively.

Permanent-way.—The line has been laid with 4½-lb flat-footed steel rails on sal sleepers.

Ballast.—The line is ballasted throughout with stone.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 955 feet radius.

Gradients.—The ruling gradient of the Southern extension is 1 in 200 and of the Eastern and Western extensions, 1 in 100.

Terms of contracts.—See under Bengal Dooars railway proper, 13 (a).

Statistics of working—

TABLE I.					TABLE II.		
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.	
	Rs.	Rs.	Rs.		Rs.		
1897	72,151	...	...	...	...	...	...
1898	4,63,611	...	...	...	...	...	...
1899	26,75,455	...	...	...	...	...	...
1900	47,11,632	16,191	5,015	0.11	13	72.31	
1901	62,26,567	1,76,399	68,937	1.11	47	69.92	
1902	72,66,166	2,53,631	86,266	1.19	62	65.99	
1903	79,30,172	3,47,832	1,05,916	1.34	71	69.55	
1904	84,97,571	4,15,179	1,08,680	1.29	68	73.85	
1905	87,92,080	5,12,343	1,97,824	2.25	85	61.39	
1906	89,99,516	5,83,852	2,91,256	3.23	96	50.11	

Number Main head 14 Sub-heads (a) to (d). **BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR RAILWAY SYSTEM—**

Lines comprising the system.—The Bhavnagar-Gondal-Junagad-Porbandar railway system is made up of—

	Open line.
	Miles.
(a) Bhavnagar-Gondal-Junagad-Porbandar railway (3' 3½" gauge)	334.19
(b) Dhrangadra railway (3' 3½" gauge)	20.83
(c) Jamnagar railway (3' 3½" gauge)	54.23
(d) Jetalsar-Raykot railway (3' 3½" gauge)	46.21
Total	455.45

14 (a) Bhavnagar-Gondal-Junagad-Porbandar railway proper (3' 3½" gauge)—

This line was constructed by Government agency, and is owned and worked by the Native States after which it is named.

Details of construction—

The line is 334.19 miles long. It consists of the following sections, (1) Bhavnagar to Wadhwan, 105.03 miles, (2) Dhola to Porbandar Baudar, 159.51 miles, and (3) Jetalsar to Veralval Bandar, 69.65 miles. Sanction to the construction of the first section was given in 1879, to the second section in 1879 and 1888, and they were opened through in 1880 and 1889, respectively. The third section was sanctioned in 1886 and opened through in 1890.

APPENDIX 38—*contd.**History of railways constructed and in progress.*

(For Index see page 112.)

Number ^{Main head 14} Sub-heads (a) to (d). **BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR RAILWAY SYSTEM—*contd.*****14 (a) Bhavnagar-Gondal-Junagad-Porbandar railway proper (3' 3½" gauge)—*concl'd.*****Details of construction—*concl'd.***

Permanent-way.—The permanent-way consists of 41½-lb. flat-footed steel rails on creosoted pine and deodar sleepers, except on the Dhoraji-Porbandar section, where the rails are laid on steel pea-pod sleepers.

Ballast.—The line is ballasted with broken stone, with the exception of the length between Chuda and Wadhwan which is ballasted with kunkur.

Fencing.—The line is practically unfenced.

Curves.—The sharpest curve is of 1,200 feet radius.

Gradients.—The ruling gradient is 1 in 200, except on the Jetalsar-Veraval section, where it is 1 in 150.

Terms of contract—

The railway is worked under the following agreement:—

Agreement of—28th November 1896, having effect from the 1st January 1897 (between the several proprietary States) for management and working by a Board of Control.

The general conditions of the agreement are as follows:—

Government aid.—Nil.

Terms of agreement.—The whole system is worked by a Board of Control, consisting of one nominee of Government to be President, and one nominee from each of the proprietary States of Bhavnagar, Gondal, Junagad and Porbandar. The existing lines owned by those States are separately and entirely described as the "Integral railways," and their combination is termed the "Open system." The decisions of the Board of Control are based on the majority of "Members' single votes" and "Proprietary votes" recorded. "Members' single votes" prevail at special meetings, where each member has one vote; while "Proprietary votes," i.e., votes revised annually on varying capital outlay, prevail at ordinary and extraordinary meetings.

Currency of agreement.—The term of the agreement is from the 1st January 1897 to the 31st December 1900. Until a new agreement is adopted the terms of this agreement remain in force.

Power of Board to determine agreement.—By unanimous vote the Board of Control can cancel or modify any of the clauses of the agreement, and can also rescind or alter any resolution; no changes can otherwise be made until expiry of three months from date of passing such resolution. Any proprietary State can terminate the agreement after the 31st December 1900, subject to 12 months' notice at the beginning of the year.

Terms of working.—The earnings of the several integral railways belong wholly and exclusively to each integral railway, and, similarly, the capital and revenue expenditure is wholly borne by the same. All expenditure on the open system and on the integral railways as may require apportionment is divisible as prescribed in Appendix A to the agreement. The Bhavnagar State provides funds for working the whole system as well as for ordinary capital on the integral railways, and is secured against all such disbursements by the payment into the Bhavnagar State Treasury of all receipts of the entire open system. All funds for major capital works are provided by the integral railway concerned, or by special arrangement with the Bhavnagar State Treasury. Each integral railway is the sole proprietor of all works, buildings, etc., on its own length of line and is entitled to 7½ per cent. interest on the paid-up value of all property in occupancy for open system purposes, to compensation for losses for works and buildings falling into disuse and to 7½ per cent. per annum for any additional accommodation required by the open system.

Rates and fares.—The maximum scale of rates and fares sanctioned by Government is applicable to the whole system but rates and fares may be altered within this scale so as to accommodate them to the circumstances of traffic on any integral railway: provided that such alteration be not prejudicial to the interests of any other integral railway.

Statistics of working—

TABLE I.

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1879	4,80,177	...	...	...	...	...
1880	49,19,304	...	...	...	...	...
1881	71,46,353	6,58,385	3,31,706	3.11	78	70.18
1882	86,75,711	8,76,846	3,51,649	4.09	87	59.55
1883	90,49,332	8,94,179	3,26,513	3.61	89	63.47
1884	92,92,040	10,92,312	4,98,107	5.36	109	54.46
1885	96,25,031	10,04,660	3,91,217	4.07	93	59.55
1886	98,57,553	9,65,379	4,15,149	4.21	96	57.00
1887	1,08,25,023	9,80,837	4,42,103	4.08	98	54.93
1888	1,30,63,663	11,20,260	5,06,545	3.88	109	50.58
1889	1,62,60,477	13,80,417	7,04,177	4.33	97	56.55
1890	1,68,42,051	15,71,788	6,00,267	3.56	91	61.81
1891	1,71,24,771	14,77,263	4,75,786	2.78	85	67.79
1892	1,72,52,030	15,78,173	4,37,476	2.54	91	72.25
1893	1,72,28,860	20,63,104	8,88,708	5.16	119	56.92
1894	1,73,65,592	18,40,287	7,91,335	4.56	106	49.61
1895	1,76,00,032	19,52,221	8,21,220	4.67	113	57.93
1896	1,75,63,395	19,80,878	9,89,274	5.63	114	50.06
1897	1,76,53,652	19,21,640	8,19,081	4.64	105	55.04
1898	1,78,56,546	16,08,657	7,09,781	3.98	97	58.22
1899	1,79,50,272	18,53,483	9,26,935	5.16	107	49.99
1900	1,80,00,616	19,53,365	10,10,773	5.62	113	48.27
1901	1,80,96,671	15,37,378	6,80,089	3.76	89	55.76
1902	1,80,87,538	13,71,837	5,68,342	3.13	79	58.72
1903	1,81,53,314	16,04,638	8,36,670	4.61	93	47.86
1904	1,80,44,250	18,60,585	10,39,916	5.78	107	44.11
1905	1,80,09,429	18,51,324	9,90,981	5.50	106	46.47
1906	1,81,74,947	19,57,290	11,07,581	6.09	113	48.41

TABLE II.

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 112.]

Number ^{Main head 11} _{Sub-heads (a) to (d)} **BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR RAILWAY SYSTEM—*contd.***

14 (b) Dhrangadra railway (3' 3½" gauge)—

This line was constructed for the Dhrangadra State by the Bhavnagar-Gondal-Junagad-Porbandar railway by which it is being worked.

Details of construction—

The line is 20·83 miles long and connects Wadhwan with Dhrangadra. Its construction was sanctioned in 1897 and it was opened in 1898.

Permanent-way.—The permanent-way consists of 41½-lb. flat-footed steel rails laid on deodar sleepers.

Ballast.—The ballast used is of broken sand-stone.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 1,400 feet radius.

Gradients.—The ruling gradient is 1 in 175.

Terms of contract—

The railway is worked by the Board of Control of the Bhavnagar-Gondal-Junagad-Porbandar railway under an *Agreement*—having effect from the date on which the line was opened to traffic.

The general conditions of the agreement are as follows:—

Government aid.—Nil.

Currency of agreement.—The agreement shall hold good so long as the working agreement of the Bhavnagar-Gondal-Junagad-Porbandar railway, dated the 28th November 1896, is in force.

Terms of working.—Forty per cent. of gross earnings (subject to a biennial revision) *plus* 5 per cent. for hire of rolling stock and in addition, actual expenditure on the maintenance of Way, Works and Stations.

Rates and fares.—The same rates and fares as are applicable to the Bhavnagar-Gondal-Junagad-Porbandar railway.

Statistics of working—

TABLE I.					TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1897	5,830	—	—	—	—	—
1898	5,03,589	23,395	10,617	1·79	37	54·62
1899	6,06,104	63,876	29,978	3·46	59	67·16
1900	5,86,534	57,366	18,984	3·21	53	66·91
1901	5,86,100	46,196	11,765	2·01	43	74·53
1902	5,85,911	37,731	8,075	1·38	35	78·60
1903	5,86,638	43,054	11,713	1·99	40	72·80
1904	5,87,116	47,516	15,446	2·63	44	67·49
1905	5,86,695	49,942	13,375	2·28	45	72·73
1906	5,86,791	65,121	25,707	4·35	60	60·52

14 (c) Jamnagar railway (3' 3½" gauge)—

This line was constructed for the Navanagar State by the Bhavnagar-Gondal-Junagad-Porbandar railway by which it is being worked.

Details of construction—

The railway is 5·422 miles long and connects Rajkot with Bedi Banlar. Its construction was sanctioned in 1893 and it was opened in 1897.

Permanent-way.—The permanent-way consists of 41½-lb. flat-footed steel rails on creosoted pine and deodar sleepers.

Ballast.—The ballast used is of broken stone.

Fencing.—The line is unfenced except at the approaches to the Victoria bridge near Jamnagar and to the south of the Jamnagar station yard.

Curves.—The sharpest curve is of 1,000 feet radius.

Gradients.—The ruling gradient is 1 in 200.

Terms of contract—

The railway is worked by the Board of Control of the Bhavnagar-Gondal-Junagad-Porbandar railway under an *Agreement*—having effect from the date on which the line was opened to traffic.

The general conditions of the agreement are the same as apply to the Dhrangadra railway, [14] (b)] except as follows:—

Terms of working.—*Forty per cent. of gross earnings (subject to a biennial revision), *plus* actual expenditure on the maintenance of way, works and stations; the locomotives and rolling stock being supplied by the proprietary State.

* Reduced with effect from the 1st July 1906 to 35 per cent. in half-years when the earnings per mile per week exceed Rs. 50.

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 14} Sub-heads (a) to (d). BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR RAILWAY SYSTEM—concl'd.

14 (c) Jamnagar railway (3' 3½" gauge)—concl'd.

Statistics of working—

Calendar year.	TABLE I.				TABLE II.	
	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1894	15,000	...	...	...	...	...
1895	62,956	...	...	...	...	...
1896	14,91,727	...	...	...	...	...
1897	22,50,533	81,476	28,954	1.29	41	65.73
1898	23,18,196	1,02,915	31,782	1.37	36	69.12
1899	23,68,558	1,26,323	51,510	2.23	35	59.20
1900	23,69,181	1,49,153	59,540	2.58	53	60.09
1901	23,09,969	1,36,314	51,101	2.22	48	62.29
1902	23,58,210	1,31,194	33,751	2.48	46	59.00
1903	23,58,338	1,30,756	60,122	2.55	50	56.98
1904	23,27,281	1,11,650	56,721	2.14	70	50.78
1905	23,27,105	1,48,341	62,068	2.66	53	58.20
1906	23,26,826	1,51,355	60,076	2.58	54	60.30

14 (d) Jetalsar-Rajkot railway (3' 3½" gauge)—

This line was constructed for the Jetalsar-Rajkot Railway Syndicate by the Bhavnagar-Gondal-Junagad-Porbandar railway by which it is being worked.

Detail of construction—

This line is 46.21 miles long. Its construction was sanctioned in 1892 and it was opened in 1893.

Permanent-way.—The permanent-way consists of 41½-lb. flat-footed steel rails on creosoted pine sleepers, except for five miles where the rails are laid on steel trough sleepers.

Ballast.—The ballast used is of broken stone.

Fencing.—The line is unfenced except between Rajkot Para and Rajkot Junction.

Curves.—The sharpest curve is of 955 feet radius.

Gradients.—The ruling gradient is 1 in 200.

Terms of contract—

The railway is worked by the Board of Control of the Bhavnagar-Gondal-Junagad-Porbandar railway under an agreement—having effect from the date on which the line was opened to traffic.

The general conditions of the agreement are the same as apply to the Dhrangadra railway [14 (b)] except as follows:—

Terms of working.—* Forty per cent. of gross earnings (subject to a biennial revision), plus actual expenditure on maintenance of way, works and stations; the locomotives and rolling stock to be supplied by the Proprietary State.

* Reduced with effect from 1st January 1907 to 35 per cent. in half-years when the earnings per mile per week exceed Rs. 50.

† The Proprietary State not having supplied the locomotives and rolling stock a further deduction of 5 per cent. from gross earnings is made as hire for stock.

Statistics of working—

Calendar year.	TABLE I.				TABLE II.	
	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1892	7,89,792	...	...	...	...	...
1893	14,95,503	...	...	...	...	...
1894	14,99,005	1,03,096	50,896	3.35	59	50.59
1895	15,03,585	1,53,556	61,152	4.08	65	60.68
1896	15,20,265	1,83,938	77,418	5.15	76	57.70
1897	15,17,463	1,97,116	84,238	5.51	82	57.26
1898	15,76,017	2,05,753	84,720	5.47	85	58.72
1899	15,89,208	1,78,911	76,957	4.82	74	57.50
1900	15,74,082	1,94,027	78,726	4.97	83	60.13
1901	15,74,039	2,02,718	86,214	5.48	84	57.17
1902	15,74,039	1,76,383	67,251	4.27	73	61.67
1903	15,78,593	1,41,917	54,485	3.45	60	62.25
1904	15,78,658	1,66,404	63,230	4.01	69	62.00
1905	15,79,655	1,88,139	69,48	4.39	78	62.25
1906	15,80,207	1,91,175	74,82	4.74	80	60.83
1906	15,82,472	1,83,261	65,653	4.15	76	61.18

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 15}
_{Sub-heads (a) & (b)} **BURMA RAILWAYS SYSTEM—**

Chairman.—Sir Auckland Colvin, K.C.S.I., K.C.M.G., C.I.E.*Managing Director.*—Lieutenant-Colonel Alfred Glynn Begbie, R.E.*Offices.*—199, Gresham House, Old Broad Street, London.

Lines comprising the system.—The Burma railways system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(a) Burma railways (3' 3½" gauge)	1,340 15	72 95	1,413 10
(b) Burma railways extensions (3' 3½" gauge) . . . . .	...	186 93	186 93
Total	1 340 15	259 88	1,600 03

15 (a) Burma railways proper (3' 3½" gauge)—

The Burma Railways Company was formed in 1896 for the purpose of taking over the working of the then existing system of State railways (3' 3½" gauge) in Burma and extending it by the construction of other lines, particularly one from Mandalay to Kunglong. The railways taken over by the Company from Government on the 1st September 1896 comprised the following lines:—Rangoon to Prome on the Irrawaddy river; Rangoon to Mandalay, and thence to the bank of the Irrawaddy, opposite Sagaing; and Sagaing to Mogawng, with an extension to Myitkyina and a branch to Katha, whence there is communication by river with Bhamo.

Details of construction—

The open mileage of the Burma railways, 1,340.15 miles, consists of (1) *Main line section*, main line (Rangoon to Mandalay), 386 miles, branches, 81.60 miles; (2) *Irrawaddy section* (Rangoon to Prome), 161 miles; (3) *Mu Valley section*, main line (Sagaing to Myitkyina), 331.29 miles; branches, 91.45 miles; (4) *Mandalay-Kunglong section* (Myohaung to Lashio), 177.84 miles, and (5) *Bassein-Heuzada-Lelpadan section*, 110.96 miles. Of the above 23.80 miles are double line.

First sanction to the construction was given in 1874; and the first three sections were opened through in 1889, 1877 and 1898, respectively, and the last two sections in 1903.

Besides the above 72.95 miles were sanctioned for construction, viz. (1) from Thanaing to Malagaon, 6.70 miles, and (2) from Neikhan to Begayet, 66.25 miles. Work on (1) has not yet been commenced while that on (2) has been suspended.

Permanent-way.—The rails in use on the system are 60-lb., 50-lb. and 44½-lb. flat-footed steel. The sleepers throughout are generally of teak, pyinma and pyinkado, the last named largely predominating.

Ballast.—The ballast used is either shingle or broken stone.

Fencing.—The main line, the Irrawaddy line and the Bassein-Heuzada line are fenced. The Mu Valley line is generally unfenced, except at a few stations. The Mandalay-Kunglong section is unfenced.

Curves.—On the main line (Rangoon to Mandalay), the sharpest curve has a radius of 573 feet. on the Rangoon-Prome section of 1,146 feet. The sharpest curves on the Bassein-Heuzada, Lelpadan-Tharawaw, Meiktila-Myingyan and Sagaing-Alon branches have radii of 955, 1,432, 1,273 and 2,865 feet, respectively; on the Lashio branch of 337 feet; on the Mu Valley line, the Katha branch and the Nankan-Mohayin section of 573 feet.

Gradients.—The ruling gradient on the main line is 1 in 200, uncompensated; on the Lashio branch it is 1 in 25, compensated; on the Mu Valley line 1 in 60, uncompensated; on the Myingyan branch, 1 in 100, uncompensated; on the Sagaing-Alon branch, 1 in 150, uncompensated, and on the Katha branch, 1 in 50, compensated.

Terms of contract—

The railways are worked under the following contract:—

Contract of—9th March 1897 (between the Secretary of State and the Burma Railways Company) for transfer and management.

The general conditions of the contract are as follows:—

Government aid.—Interest is guaranteed at 2½ per cent. on the Company's share capital. Land was provided free.

Currency of contract.—Government may determine the contract, after giving six months' notice, if the Company fails to perform its obligations, or if the undertaking be, in the opinion of the Secretary of State, in course of gross mismanagement by the Company, or if it be worked at a loss for three consecutive half-years. Government may also determine the contract on the 31st December 1921, or at the end of any succeeding tenth year, by giving twelve months' previous notice. On the determination of the contract from any cause the Secretary of State is to repay to the Company in sterling at par the capital raised by the latter.

Power of Company to surrender contract.—Nil.

Terms of working.—After deducting working expenses (which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as a "Minor Work," subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year, and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) the net receipts in each half-year are to be applied in payment to Government of—

(1) the equivalent of the interest paid for the half-year on any debentures issued by the Company;

(2) the equivalent of the guaranteed interest at 2½ per cent. per annum on the Company's capital of £2,000,000, and of the interest payable on any additional share capital raised by the Company;

(3) the equivalent of interest at 2½ per cent. per annum on the sterling equivalent of the capital expenditure by Government on the railways up to the date of the transfer, and of interest on any additional moneys supplied by Government.

After payment of the interest above-mentioned, any surplus which may remain unpaid in a year ending on the 30th June to be divided between Government and the Company in the proportion of four-fifths to the former and one-fifth to the latter.

Rates and fares.—Certain maxima and minima have been fixed within which the Company is permitted to vary rates.

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 15}_{Sub-heads (a) and (b)} BURMA RAILWAYS SYSTEM—concl'd.

15. (a) Burma railways proper (3' 3½" gauge)—concl'd.

Statistics of working—

Calendar year.	TABLE I.							TABLE II.	
	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Company's share of net earnings.*	Gain or loss to the State	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1877 . . . . .	...	...	...	...	...	...	...	61	129.36
1878 . . . . .	...	...	...	...	...	...	...	115	93.03
1879	1,22,86,597	9,55,919	1,41,743	1.14	5,17,438	...	-4,05,695	114	85.17
1880	1,25,37,319	13,22,110	5,21,685	4.14	5,62,331	...	-41,216	153	60.60
1881	1,36,51,992	15,43,622	6,15,977	4.73	5,86,210	...	+58,867	181	58.21
1882	1,78,39,223	15,75,691	6,30,430	3.53	6,23,969	...	+6,161	184	59.99
1883	2,19,77,689	15,65,888	5,60,766	2.55	7,46,968	...	-1,85,302	187	64.66
1884	2,56,37,089	21,05,421	8,21,936	3.21	9,69,215	...	-1,47,279	181	60.96
1885	2,72,55,343	21,63,656	4,73,123	1.73	10,61,184	...	-5,88,061	143	73.18
1886	2,88,52,604	26,57,955	9,41,149	3.26	12,64,242	...	-3,23,093	156	64.51
1887	3,66,52,847	31,21,263	15,58,303	4.25	13,15,249	...	+2,43,054	193	53.12
1888	4,83,73,677	33,76,218	12,71,960	2.63	18,18,560	...	-5,46,600	171	62.33
1889	5,12,49,168	46,90,263	15,73,552	3.07	20,17,224	...	-1,43,672	169	66.45
1890	5,56,22,296	51,71,432	23,48,191	4.22	21,65,308	...	+2,12,883	210	57.08
1891	6,03,31,289	58,55,197	23,71,392	3.96	23,28,237	...	+43,105	199	59.50
1892	6,64,02,875	71,00,619	35,86,038	5.10	24,90,221	...	+8,95,867	237	52.31
1893	7,03,47,005	67,22,606	22,42,493	3.19	27,19,995	...	-4,77,593	178	66.64
1894	7,37,14,721	62,87,354	25,23,328	3.15	28,94,375	...	-5,71,047	164	63.05
1895	7,57,23,659	67,11,062	27,02,356	3.57	30,91,163	...	-2,93,607	160	59.73
1896	8,13,44,229	70,08,558	29,85,751	3.67	31,43,442	...	-4,57,691	167	60.76
1897	8,73,31,890	86,76,403	38,82,673	4.45	38,31,674	1,63,877	-1,11,878	188	55.25
1898	9,24,93,509	89,91,451	37,88,523	4.10	39,49,899	1,61,076	-3,22,452	184	57.87
1899	10,11,17,647	88,25,724	36,78,407	3.54	38,35,209	1,24,994	-3,81,796	179	59.45
1900	11,33,96,635	1,10,29,947	48,94,824	4.13	38,49,026	3,47,606	+6,98,192	195	53.62
1901	11,99,22,468	1,18,85,329	49,89,676	4.18	40,41,108	4,42,439	+5,06,109	197	58.02
1902	12,70,23,590	1,25,02,671	52,72,683	4.66	43,94,423	4,69,365	+4,08,495	203	57.83
1903	13,01,30,277	1,36,14,478	52,19,322	4.01	44,06,500	4,32,246	+3,80,576	197	61.66
1904	13,38,28,678	1,41,02,418	65,70,760	4.92	44,71,268	5,92,997	+15,06,495	216	58.49
1905	13,55,91,056	1,57,75,957	61,81,063	4.56	45,35,974	6,77,542	+9,67,547	226	60.82
1906	13,97,87,368	1,67,32,405	58,61,913	4.19	46,13,499	5,66,021	+6,82,393	225	62.74

15 (b) Burma railways extensions (3' 3½" gauge)—

Details of construction—

There are two lines under construction, *viz.*, (1) Pegu to Martaban, 121.27 miles, which was sanctioned in 1903; and (2) Henzada to Kyangin, 65.66 miles, sanctioned in 1904.

Number ^{Main head 16}_{Sub-head (a)} DEOGHUR RAILWAY (3' 3½" gauge)—

Details of construction—

This line connects Deoghur with Baidyanath, a station on the East Indian Railway, and is 4.79 miles long. It was sanctioned in 1881 and opened in 1882.

Permanent-way.—The permanent-way is laid with 36-lb. steel rails on wooden sleepers.

Ballast.—The line is ballasted throughout.

Fencing.—The line is unfenced.

Curves.—The sharpest curve has a radius of 2,640 feet.

Gradients.—The ruling gradient is 1 in 60.

Terms of contract—

The railway is worked under the following contract:—

Contract of.—12th July 1883 (between the Secretary of State and the Deoghur Railway Company) for construction, maintenance and working.

The general conditions of the contract are as follows:—

Government aid.—Land was provided free of charge.

Terms of contract.—Messrs. Burn & Co. constructed the railway with capital raised locally and without any guarantee.

Currency of contract.—If the Company fails to perform its obligations Government may after giving six months' notice, determine the contract, and take over the railway at a valuation based on the earnings of the two years immediately preceding. Government may also, after the railway has been opened for traffic for 30 years, and thereafter at terms of 10 years, by giving 12 months' notice, determine the contract and take the railway over at a valuation calculated at the average market rate of the shares during the previous three years, giving the Company in addition a bonus not exceeding 20 per cent. of the value so arrived at.

Rates and fares.—Certain maxima have been fixed within which the Company is permitted to vary rates.

* Based on actual receipts and payments during the year.

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 112.]

Number ^{Main head 16} _{Sub-head (a)} **DEOGHUR RAILWAY (3' 3 $\frac{1}{2}$ " gauge)—*concl'd.***

Statistics of working—

Calendar year.	TABLE I.				TABLE II.	
	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1883	2,73,331	19,639	6,242	2.28	79	68.00
1884	2,75,060	23,735	10,704	3.90	83	54.90
1885	2,75,000	23,987	9,908	3.60	88	58.69
1886	2,75,042	25,017	11,743	4.27	100	53.06
1887	2,75,043	24,532	12,108	4.40	98	50.64
1888	2,81,180	25,812	11,521	4.10	104	55.37
1889	2,82,876	26,543	12,695	4.49	115	55.51
1890	2,82,616	26,095	10,915	3.86	105	58.17
1891	2,82,752	31,165	15,429	5.46	125	50.49
1892	2,88,329	26,964	9,707	3.37	103	64.00
1893	2,87,364	37,809	19,103	6.65	152	49.47
1894	2,87,326	29,425	9,639	3.36	118	67.17
1895	2,88,086	33,611	15,368	5.31	130	54.46
1896	2,87,797	30,914	11,493	4.00	120	61.69
1897	2,87,942	30,320	11,152	3.87	122	63.22
1898	2,88,433	32,110	6,601	2.28	129	79.44
1899	2,87,525	33,262	6,658	2.32	134	79.02
1900	2,87,379	34,900	7,376	2.56	140	78.87
1901	2,87,265	48,243	18,616	6.53	194	61.45
1902	3,01,057	29,758	6,005	2.00	110	79.75
1903	3,01,057	40,478	10,622	3.53	162	70.75
1904	3,01,057	46,355	14,701	4.88	187	68.18
1905	3,00,554	45,397	13,582	4.52	182	70.08
1906	3,01,256	53,532	20,553	6.82	215	61.61

Number ^{Main head 17} _{Sub-heads (a) and (b)} **DIBRU-SADIYA RAILWAY SYSTEM—***Chairman.*—Lord Ribblesdale.*Secretary.*—Evan A. Jack, Esq.*Offices.*—85 London Wall, London, E.C.

Lines comprising the system.—The Dibru-Sadiya railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(a) Dibru-Sadiya railway (3' 3 $\frac{1}{2}$ " gauge)	77.50	8.52	86.02
(b) Ledo and Tikak-Margherita Colliery railway (3' 3 $\frac{1}{2}$ " gauge)	8.50	—	8.50
Total	86.00	8.52	94.52

17 (a) Dibru-Sadiya railway proper (3' 3 $\frac{1}{2}$ " gauge)—**Details of construction—**

This line is 77.50 miles long and may be divided into main line (Dibrugarh to Dihing Bridge), 61.50 miles, and the Talap branch, 16 miles. Its construction was sanctioned in 1881 and it was opened through in 1885.

There are, in addition, 8.52 miles under construction.

Permanent-way.—The line is laid with 41 $\frac{1}{2}$ -lb. and 50-lb. flat-footed steel rails. The sleepers are uriam and cast iron plate of the Denham-Olpherts' type.

Ballast.—The line is partially ballasted with broken stone.

Fencing.—The line is unfenced, with the exception of a short length at Dibrugarh.

Curves.—The sharpest curve is of 700 feet radius.

Gradients.—The ruling gradient is 1 in 150.

Terms of contracts—

The railway is worked under the following contracts:—

Contracts of—26th May 1880 (between the Secretary of State and the Assam Railway Company subsequently called the Assam Railways and Trading Company) for maintenance and working.

25th July 1881—Contract modifying that of 1880.

The general conditions of the contracts are as follows:—

Government aid.—Government guaranteed the payment of a subsidy, not exceeding in any year Rs. 80,000 twelve months after the opening of the main line or after each succeeding twelve months until the end of twenty years after opening, equal, together with the net earnings of the main line, to 5 per cent. of the paid up capital of the main line. Government similarly guaranteed a subsidy for the Makum branch, not exceeding Rs. 20,000 in any year. The payment of guarantee terminated on the 30th June 1903. The free use of public roads is also provided for.

Currency of contract.—If the Company fails to fulfil its obligations, within thirty days after notice, Government can take possession and execute all repairs and works for the efficient working of the railway. Government may

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 17}
_{Sub-heads (a) and (b)} **DIBRU-SADIYA RAILWAY SYSTEM—contd.**17 (a) Dibru-Sadiya railway proper (3' 3½" gauge)—*concl'd.*Terms of contracts—*concl'd.*

determine the contract, on giving 12 months' notice (clause 19 of contract, dated 26th May 1880), at the expiry of the first five years after date of opening, and at subsequent intervals of five years, by paying twenty per cent. in excess of the value of the Company's property.

NOTE.—The Company having waived all its rights under clause 7 of contract dated 25th July 1881 to construct railways within the Lakhimpur District, Government have waived their right to purchase the railway before 1921, or at intervals of 10 years thereafter (Secretary of State's letter No. P. W. 2731, dated the 23rd December 1901).

Power of Company to surrender contract.—Nil.

Terms of working.—The Company to maintain the railway and the road on which the rails are laid and the rolling stock and other equipments to the satisfaction of the Secretary of State and to carry on the work of common carriers.

Rates and fares.—These were subject to approval by Government from time to time while subsidy was payable. If the net profits exceed 12 per cent. of paid up capital, Government may order such reduction of tariff and rates as may be considered necessary, such reduction not lessening the net profits below 12 per cent.

Statistics of working—

TABLE I.								TABLE II.		REMARKS.
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Subsidy from local Government.	Total income.	Percentage of total income on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.	
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.		
1883	22,22,253	48,220	—35,375	..	..	—35,375	..	52	171.70	
1884	40,65,288	2,06,133	—68,406	..	54,550	—13,856	..	67	131.61	
1885	49,46,729	2,57,335	—63,861	..	54,500	—9,364	..	62	123.03	
1886	49,73,753	3,46,479	53,154	1.67	54,654	1,07,808	2.17	81	80.65	
1887	53,32,605	4,01,928	1,02,540	1.92	1,00,000	2,02,540	3.80	94	74.68	
1888	53,73,445	4,25,530	1,01,759	1.89	1,00,000	2,01,759	3.75	105	76.00	
1889	55,18,750	4,61,018	1,25,117	2.27	1,00,000	2,25,117	4.08	114	73.03	
1890	57,09,682	5,14,266	1,76,960	3.10	1,00,000	2,76,960	4.85	127	65.59	
1891	67,05,474	4,98,682	1,70,526	2.54	1,00,000	2,70,526	4.03	123	65.80	
1892	69,56,304	5,13,213	1,63,719	2.35	1,00,000	2,63,719	3.79	127	68.19	
1893	71,70,562	5,12,098	1,52,972	2.13	1,00,000	2,52,972	3.53	127	70.13	
1894	70,97,487	5,31,645	1,95,732	2.76	1,00,000	2,95,732	4.17	132	63.18	
1895	74,02,729	6,01,112	2,69,543	3.64	1,00,000	3,69,543	4.99	149	55.16	
1896	74,01,496	6,47,360	3,12,286	4.22	1,00,000	4,12,286	5.57	161	51.76	
1897	74,20,119	7,74,189	2,64,750	3.57	1,00,000	3,64,750	4.92	192	68.12	
1898	74,10,474	7,81,115	2,82,478	3.80	79,000	3,61,478	4.83	194	63.85	
1899	74,56,183	8,59,114	4,19,688	6.03	37,978	4,87,666	6.54	212	47.68	The amount shown as subsidy received during 1899 was due for a previous period.
1900	77,14,340	9,00,847	4,62,381	5.99	..	4,62,381	5.99	224	48.67	
1901	82,00,747	9,28,578	4,73,307	5.77	..	4,73,307	5.77	230	49.03	
1902	82,00,694	8,51,880	4,11,187	5.01	..	4,11,187	5.01	211	51.73	
1903	82,32,530	9,16,777	4,57,974	5.56	..	4,57,974	5.56	227	50.05	
1904	87,01,363	9,48,473	4,21,317	4.84	..	4,21,317	4.84	235	55.58	
1905	87,31,147	9,34,293	4,92,053	4.95	..	4,32,053	4.95	237	54.73	
1906	88,18,873	10,08,381	4,03,634	4.63	..	4,08,634	4.63	250	59.47	

17 (b) Ledo and Tikak-Margherita Colliery railway (3' 3½" gauge) —

The line was used originally only for the purposes of bringing coal from the mines on the south bank of the Dihing river to the Dibru-Sadiya railway. It was constituted a railway and its working was taken over by the Dibru-Sadiya railway from the 1st January 1897.

Details of construction—

The line is 8.50 miles long, *viz.*, main line (Dihing bridge to Ledo) 5.59 miles, and branch (Margherita to Namdang) 3 miles. The main line was opened in 1884 and the branch in 1901.

Permanent-way.—The line is laid with 59-lb. flat-footed steel rails on uriam sleepers.

Ballast.—The main line is three-fourths ballasted with broken stone, but the Namdang branch is unballasted.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 800 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Terms of contract—

The railway is worked under the following contract :—

Contract of—30th July 1881 (between the Secretary of State and the Assam Railways and Trading Company) for coal and iron mining in the Makum coal fields and for the construction of a railway or tramway to effect a junction with the railways which may be constructed to the bank of the Dihing river.

Terms.—Contained in Government of India, Public Works Department, No. 628 R. T., dated the 6th August 1896.

APPENDIX 38—*contd.**History of railways constructed and in progress*

[For Index see page 112.]

Number ^{Main head 17} Sub-heads (a) and (b) **DIBRU-SADIYA RAILWAY SYSTEM—*concl'd.*****17 (b) Ledo and Tikak-Margherita Colliery railway (3' 3½" gauge)—*concl'd.*****Terms of contract—*concl'd.*****The general conditions are as follows:—****Government aid.—Nil.****Currency of contract.—**The coal concession is for a term of 20 years from 30th July 1881 within an area of 30 square miles, and for a further term of 30 years within an area of at least 4 square miles.**Power of Company to surrender contract.—Nil.****Terms of working.—**The colliery to be charged with the cost of maintenance of the branch and sidings owned by it and 5 per cent. of its gross earnings for the use of rolling stock; all other charges for working the open line to be divided between the railway and colliery in proportion to their respective gross earnings.**Rates and fares.—**Certain rates and fares have been sanctioned by Government.**Statistics of working:—**

TABLE I.					TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1897	11,46,240	45,871	8,024	0.70	88	82.51
1898	12,00,698	55,313	3,752	0.31	142	93.22
1899	12,83,416	63,084	22,053	1.72	162	65.04
1900	12,84,375	65,724	17,981	1.40	169	72.64
1901	16,30,162	70,293	11,145	0.68	123	84.15
1902	16,33,446	58,259	437	0.08	102	99.25
1903	16,62,082	59,077	—8,208	...	103	113.89
1904	16,62,084	56,108	13,158	0.79	120	76.55
1905	16,78,156	59,439	27,210	1.62	127	54.23
1906	16,83,031	65,115	25,052	1.49	139	61.52

Number ^{Main head 18} Sub-heads (a) to (c) **JODHPUR-BIKANER RAILWAY SYSTEM—****Lines comprising the system.—**The Jodhpur-Bikaner railway system is made up of—

	Open line. Miles.
(a) Jodhpur-Bikaner (Jodhpur section) (3' 3½" gauge)	463.89
(b) Jodhpur-Bikaner (Bikaner section) (3' 3½" gauge)	245.35
(c) Jodhpur-Hyderabad railway (British section) (3' 3½" gauge)	123.98
Total	833.22

18 (a) Jodhpur-Bikaner (Jodhpur section) (3' 3½" gauge)—**Details of construction:—****The open mileage of the section is 463.89 miles.** First sanction to construction was accorded in 1881 and the line was opened through to the British frontier in 1900. The Merta city branch was opened in 1905.**Permanent-way.—**The line is laid with 36-lb., 41½-lb. and 50-lb. flat-footed steel rails. There are also some 36-lb. iron rails in the Merta city branch. The sleepers are steel trough, deodar and pine.**Ballast.—**On the greater portion of the line the ballast consists of coarse sand, kunkur and broken stone.**Fencing.—**With the exception of a few stations, the line is unfenced.**Curves.—**There are no curves with a radius of less than 1,000 feet.**Gradients.—**The ruling gradient is 1 in 150.**Terms of contracts:—****The railway is worked under the following contracts:—****Contracts of—**13th July 1889 } (between the Government of India and the Jodhpur and Bikaner Durbars) for
30th July 1889 } constructing and working the line.**The general conditions of the contracts are as follows:—****Government aid.—**The line is the exclusive property of the two Durbars.**Currency of contracts.—**These contracts may be modified at any time by mutual consent.**Terms of working.—**Each Durbar to receive all the profits of the section of line belonging to that Durbar.**Rates and fares.—**No provision was made for rates and fares in the contracts, but certain rates and fares were approved by executive order.

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 18} Sub-heads (a) to (c). JODHPUR-BIKANER RAILWAY SYSTEM—contd.

18 (a) Jodhpur-Bikaner (Jodhpur section) (3' 3½" gauge)—concl'd.

Statistics of working—

TABLE I.					TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1883	4,99,866	40,361	23,110	4.62	42	42.74
1884	8,09,995	64,262	31,748	3.92	39	50.59
1885	15,40,335	1,70,601	1,12,505	7.30	54	34.30
1886	21,22,593	2,03,728	1,33,318	6.23	62	35.20
1887	22,81,433	3,18,703	1,91,677	8.40	55	39.88
1888	22,80,006	3,60,803	1,91,555	8.40	56	46.91
1889	22,73,978	3,59,358	1,92,258	8.45	56	46.50
1890	22,73,338	3,70,825	1,96,192	8.63	58	47.08
1891	41,87,110	6,12,839	3,34,364	7.99	66	45.44
1892	60,59,552	9,46,980	5,28,941	8.73	74	44.14
1893	64,74,611	8,31,765	4,33,895	6.70	52	47.83
1894	64,49,374	10,81,156	6,69,373	10.38	65	38.09
1895	64,32,931	9,74,738	5,69,246	8.85	58	41.60
1896	64,78,328	11,64,465	7,38,273	11.40	70	36.90
1897	74,30,176	11,22,658	7,44,799	9.94	67	33.66
1898	1,00,85,594	12,22,726	7,30,956	7.25	73	42.22
1899	1,13,42,183	19,09,097	11,66,844	10.29	102	38.88
1900	1,14,28,508	16,28,478	9,07,480	7.94	81	44.27
1901	1,17,24,896	15,67,073	7,14,826	6.10	66	54.39
1902	1,18,69,424	16,76,216	8,35,202	7.04	71	50.17
1903	1,19,31,439	16,34,708	8,91,196	7.47	69	45.48
1904	1,21,90,840	16,87,424	9,58,365	7.86	71	48.21
1905	1,22,63,774	19,16,254	11,01,294	8.98	79	43.53
1906	1,22,77,015	20,91,368	12,23,531	9.97	87	41.50

18 (b) Jodhpur-Bikaner (Bikaner section) (3' 3½" gauge)—

Details of construction—

The section is 245.35 miles long. Its construction was first sanctioned in 1890 and it was opened through to Bhatinda in 1902.

Permanent-way.—The permanent-way consists of 36-lb. flat-footed steel rails on steel trough and deodar sleepers.

Ballast.—The ballast consists of coarse sand and small kunkur, except on the Suratgarh-Bhatinda section where it is broken brick and kunkur.

Fencing.—The line is unfenced, except at a few stations.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 150.

Terms of contracts—

See under Jodhpur section, 18 (a).

Statistics of working—

TABLE I.					TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1890	4,15,590	...	...	...	...	...
1891	14,33,706	5,130	2,724	0.19	36	46.99
1892	9,48,622	76,547	24,904	2.63	34	67.47
1893	9,65,771	66,725	25,735	2.66	30	61.43
1894	9,69,407	80,274	40,447	4.17	35	49.61
1895	9,71,084	86,539	45,096	4.64	38	47.89
1896	9,73,294	1,20,727	75,382	7.75	53	37.56
1897	9,73,473	1,17,010	65,504	6.73	52	44.02
1898	23,14,152	1,37,472	77,616	3.35	31	43.54
1899	23,61,917	1,74,599	1,01,344	3.65	37	40.22
1900	32,60,432	1,92,358	1,04,902	3.22	43	45.43
1901	48,93,535	2,46,875	1,05,697	2.16	30	57.18
1902	52,49,339	3,22,022	1,42,580	2.72	30	55.72
1903	51,80,925	5,25,329	2,66,197	5.19	41	49.33
1904	50,98,549	7,23,901	4,05,677	7.96	57	43.96
1905	51,72,406	8,89,432	5,63,383	10.87	69	36.84
1906	52,70,205	10,92,838	4,74,513	9.00	86	56.58

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 18 Sub-heads (a) to (c) . JODHPUR-BIKANER RAILWAY SYSTEM—concl'd.

18 (c) Jodhpur-Hyderabad (British section) (3' 3½" gauge)—

Details of construction—

The line connects Hyderabad (Sind) with the Jodhpur system and is 123·98 miles long. Its construction was first sanctioned in 1891 and it was opened through in 1900.

Permanent-way.—The section is laid with 60-lb. iron, and 50-lb. and 41½-lb. flat-footed steel rails on deodar and Denham-Olipherts' cast-iron sleepers.

Ballast.—The ballast is of kunkur, stone and broken brick.

Fencing.—With the exception of a few stations, the line is unfenced.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 150.

Terms of contract—

The railway is worked under the following agreement:—

Agreement of—22nd December 1900 (between the Government of India and His Highness the Maharaja of Jodhpur and the Council of Regency, Bikaner) for the construction of a railway, on the 3' 3½" gauge, from Balotra to Hyderabad and for working the section from the Jodhpur Frontier to Hyderabad.

The general conditions of the agreement are as follows:—

Currency of agreement.—As regards the working of the railway this agreement remains in force until determined by either party, on 12 months' notice, on the 1st day of January or the 1st day of June in any year.

Terms of working.—Working expenses, excluding maintenance, are divided between the British and Native State sections in the ratio of the gross earnings of each section. Maintenance charges to be actual cost for each section of line.

Rates and fares.—Maximum and minimum rates and fares and the classification in force on the North Western (State) railway from time to time to be in force on the British section.

NOTE.—Government of India, in letter No. 255 R. T., dated the 6th March 1900, approved of the Rajputana-Malwa railway classification of goods which is in force on the Native State section being adopted on the British section, the stipulation in agreement requiring the adoption of the North Western (State) railway classification remaining unaltered in case it may be considered desirable to enforce it hereafter.

Statistics of working—

TABLE I							TABLE II.		
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay	Interest.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.	REMARKS.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.		
1891	2,31,401				5,356	—5,356	...		
1892	16,31,818	23,206	—1,929		59,649	—61,598	29	105·87	The figures of capital outlay in 1900 include the outlay on the Hyderabad-Bahokli section.
1893	16,61,091	1,30,817	16,171	0·99	65,767	—49,296	43	87·41	
1894	17,27,619	1,45,222	36,062	2·03	68,940	—32,878	47	75·17	
1895	17,74,095	1,68,139	46,400	2·63	71,080	—24,471	55	72·28	
1896	18,00,799	1,87,503	64,376	3·57	71,429	—7,044	61	65·67	
1897	18,37,796	2,05,182	59,113	3·23	73,552	—14,139	67	71·04	The gain to the State in 1901 was due to the completion of the line which was previously only partially open.
1898	20,19,772	2,22,647	70,159	3·47	77,553	—7,394	73	68·49	
1899	33,48,948	3,25,212	88,463	2·64	1,07,380	—18,917	74	60·73	
1900	41,71,400	1,93,211	65,323	1·10	1,78,984	—1,13,051	65	65·93	
1901	38,81,861	4,24,307	1,78,367	4·47	1,52,429	+ 21,138	66	59·09	
1902	40,45,972	5,04,008	2,18,814	5·11	1,59,771	+ 59,043	78	56·59	
1903	40,45,358	5,84,094	2,62,379	6·49	1,60,179	+ 1,02,200	91	55·08	
1904	39,58,681	6,48,728	3,45,006	8·72	1,54,816	+ 1,90,160	101	46·82	
1905	39,67,918	7,23,989	3,69,002	9·30	1,58,622	+ 2,10,380	112	49·03	
1906	40,70,675	8,91,456	5,11,938	12·58	1,57,778	+ 3,54,160	138	42·57	

Number Main head 19 Sub-head (a) . MORVI RAILWAY (3' 3½" and 2' 6" gauges)—

The 2' 6" gauge connection between Wadhwan and Rajkot by this railway has been converted to the 3' 3½" gauge— from Wadhwan to Than Road, 31·34 miles, on a new alignment and onwards to Rajkot, 42·60 miles, on the original alignment with a few unimportant diversions. The line between Vankner and Morvi has been retained on the 2' 6" gauge.

Details of construction—

The line is 94·64 miles long, divided into the 3' 3½" gauge section (Wadhwan to Rajkot), 73·94 miles, and the 2' 6" gauge section (Vankner to Morvi and a quarry siding), 20·70 miles. The construction of the 3' 3½" gauge section was sanctioned in 1902 and this section was opened in 1905. The construction of the 2' 6" gauge section was sanctioned in 1883 and it was opened in 1887.

Permanent-way.—The permanent-way on the 3' 3½" gauge section consists of 41½-lb. flat-footed steel rails on half round teak and creosoted pine sleepers; and that on the 2' 6" gauge section consists of 29-lb. flat-footed steel rails on creosoted pine sleepers.

Ballast.—The line is ballasted with moorum (di-integrated) trap.

Fencing.—The line is unfenced.

Curves.—The sharpest curve on the 3' 3½" gauge is of 950 feet radius; and that on the 2' 6" gauge is of 300 feet radius.

Gradients.—The ruling gradient is 1 in 150 on both gauges.

Terms of contract—

The Morvi railway is owned by His Highness the Thakore Sahib of Morvi, and is under his control.

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 112.]

Number ^{Main head 19} _{Sub-head (a)} **MORVI RAILWAY (3' 3½" and 2' 6" gauges)—*concll.***

Statistics of working—

TABLE I.					TABLE II.	
Calendar year.					Earnings per mile per week.	Proportion of expenses to earnings.
					Rs.	
					Rs.	
					Rs.	
1886	.	.	.	.	6,88,671	103.28
1887	.	.	.	.	11,06,500	86.87
1888	.	.	.	.	11,77,842	86.44
1889	.	.	.	.	12,46,800	68.01
1890	.	.	.	.	20,35,864	70.34
1891	.	.	.	.	20,55,599	64.90
1892	.	.	.	.	21,01,519	57.83
1893	.	.	.	.	21,57,365	54.86
1894	.	.	.	.	22,24,526	56.46
1895	.	.	.	.	23,00,006	45.91
1896	.	.	.	.	23,82,315	53.06
1897	.	.	.	.	24,76,757	50.49
1898	.	.	.	.	24,79,448	46.41
1899	.	.	.	.	25,06,414	59.86
1900	.	.	.	.	27,28,115	62.49
1901	.	.	.	.	27,59,192	65.00
1902	.	.	.	.	27,32,718	62.86
1903	.	.	.	.	27,88,452	51.44
1904	.	.	.	.	34,06,136	46.73
1905	.	.	.	.	43,90,517	46.99
1906	.	.	.	.	44,90,459	48.11

Number ^{Main head 20} _{Sub-heads (a) to (c)} **ROHILKUND AND KUMAON RAILWAY SYSTEM—***Chairman.*—Sir Charles Turner, K.C.I.E.*Managing Director*—Alexr. Izat, Esq., C.I.E., M.I.C.E.*Offices*—237 Gresham House, Old Broad Street, London, E.C.

Lines comprising the system.—The Rohilkund and Kumaon railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(a) Rohilkund and Kumaon railway (3' 3½" gauge)	117.87	84.12	201.99
(b) Lucknow-Bareilly railway (3' 3½" gauge)	237.04	...	237.04
(c) Powayan Light railway (2' 6" gauge)	39.50	...	39.50
Total	394.41	84.12	478.53

Running powers—*Home line over foreign line—*

	Miles.
Bhojepura to Bareilly, Lucknow-Bareilly railway, for passenger and goods trains	12.00

Foreign line over home line—

Bengal and North-Western, Daliganj to Aishbagh, for passenger and goods trains	5.40
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20 (a) Rohilkund and Kumaon railway proper (3' 3½" gauge)—**Details of construction—**

The open mileage of the Rohilkund and Kumaon railway proper is 117.87 miles, made up of (1) main line, Bhojepura to Kathgodam, 53.92 miles and (2) the Bareilly-Kasganj section, 63.95 miles.

The main line was sanctioned for construction in 1832 and opened in 1844. The portion of the Bareilly-Kasganj section from Bareilly to Soron was sanctioned in 1903 and opened in 1906 and the portion from Soron to Kasganj was taken over from the Rajputana-Malwa railway in 1906.

There are 84.12 miles under construction, *viz.*, (1) the Moradabad-Ramnagar branch, 47.69 miles; and (2) the Lalkua-Kashipur branch, 36.43 miles. The construction of these branches was sanctioned in 1903.

Permanent-way.—The permanent-way consists of 50-lb. steel rails on *sâls* sleepers.

Ballast.—The ballast consists of broken brick and shingle.

Fencing.—The line is partially fenced.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 70.

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 112.]

Number ^{Main head 20} _{Sub-heads (a) to (g)} **ROHILKUND AND KUMAON RAILWAY SYSTEM—*contd.***

20 (a) Rohilkund and Kumaon railway proper (3' 3½" gauge)—*contd.*

Terms of contracts:—

The Rohilkund and Kumaon and Lucknow-Bareilly railways are worked under the following contracts:—

Contracts of—12th October 1882.—Rohilkund and Kumaon Railway Company's original contract.

8th September 1890.—Contract for the working and maintenance of the Lucknow-Bareilly railway and the Company's line as one system. (Principal contract.)

31st December 1892.—Relating to advances of capital by Government.

5th February 1901.—Contract modifying the terms of the previous contracts.

24th April 1903.—Contract as to rate of exchange for purposes of contracts of 12th October 1882 and 8th September 1890.

15th July 1904.—Contract for construction of new branches and taking over a branch from Kasganj to Soron and other matters supplemental to contracts of 1882, 1890, 1901 and 1903.

The general conditions of the contracts are as follows:—

Government aid.—Company's section.—Government guaranteed interest at 4 per cent. in sterling on the capital expended up to £200,000 until the line was opened for traffic, but not for longer than the first two years of the contract; thereafter a subsidy of Rs. 20,000 half-yearly for ten years from date of opening, which ceased on 31st December 1894. Land was provided free, subject to the condition that the Company pays on demand to Government the cost price of land purchased by the latter subsequent to the date of the principal contract.

Lucknow-Bareilly section.—The Company to raise £160,000 capital by debentures which Government guarantees as to repayment of capital and payment of interest, the Company undertaking to reimburse Government from its own funds any amount by which the guarantee may exceed the annual limit of Rs. 96,000. Land was provided free of charge.

Note.—All sums to be advanced by Government after the 31st December 1900 bear interest at the rate of 3½ per cent. per annum under the agreement dated the 5th February 1901.

Terms of contract.—The Lucknow-Bareilly section was taken over in an unfinished state by the Company which raised the sum of £160,837 by the issue of debentures for the purpose of completing it. The remainder of the capital expended has been supplied by Government. The contract provides that the railway shall be worked in conjunction with the Company's own line, a joint account of working expenses being kept and the total amount divided half-yearly between the State line and the Company's line in proportion to their respective gross earnings.

Currency of contracts.—

(1) *Rohilkund and Kumaon railway contract.*—Government may terminate the contract at the end of the 30th year (*i.e.*, on the 31st December 1912) or the 50th year (*i.e.*, on the 31st December 1932), by giving 12 months' notice. If the contract terminates by such notice or by efflux of time, Government have to pay 25 times the average net earnings, deducting the Government share of surplus profits during the 5 years preceding the termination. Government may also determine the contract at any time on six months' notice, if the Company fails to observe its obligations, on payment of the value of permanent-way, stock and plant, or may call upon the Company to accept the same in lieu of payment in which case the Company must remove its property within nine months from the termination of the contract, otherwise it becomes the property of the Government.

(2) *Lucknow-Bareilly railway.*—Government may determine the contract on the 31st December 1907, or on the 31st December of any subsequent year, by giving twelve months' notice. In the event, however, of the original contract, dated the 12th October 1882, terminating by efflux of time or under notice of purchase or notice of determination, this contract, *ipso facto*, also terminates at the same time. Government may also terminate the contract if the Company fails to observe its obligations after six months' notice. On determination of the contract Government resume possession of the State railway on payment to the Company of the amount of the capital received, or take over its liabilities with respect to such capital.

Power of Company to surrender contract.—Nil.

Terms of working.—Company's section.—During the period that the Government are liable to pay interest, after deducting working expenses, (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year, and a payment of Rs. 20 for every mile of line open to traffic to be made half-yearly to Government for supervision), the surplus profits, after repayment of the guaranteed interest, go to the Company. Subsequently half the surplus profits, after 5 per cent. for the year (within a limit of £5,000 for each half-year), has been appropriated to the Company, are to be applied in repayment to Government of arrears of guaranteed interest and interest thereon. The other half and any ultimate surplus to belong to the Company. After the year ending 31st December 1897 Government to receive half the surplus profits in excess of 6 per cent.

Note.—It has been agreed that, in calculating the surplus profits for division, sums received by the Company as its share of the surplus profits of the Lucknow-Bareilly railway shall not be taken into account.

Lucknow-Bareilly section.—The working expenses of the system, (which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year, and a payment of Rs. 20 for every mile of line open to traffic to be made half-yearly to Government for supervision), are divided between the Company's line and the State railway in proportion to their gross earnings, the profits of the State railway being applied (i) in meeting payment of interest on the debentures and of interest at 4 per cent. on any further capital supplied by the Company for the undertaking or advanced by Government; (ii) in payment to Government of interest at 4 per cent. on their capital in the undertaking; and (iii) the residue to be divided half-yearly between Government and the Company in the ratio of their respective shares of capital in the undertaking.

Any insufficiency of the profits to meet the charges under (i) that may be met by money supplied by Government shall be a cumulative preference charge against subsequent profits before division of residue.

Rates and fares.—Certain maxima and minima have been fixed within which the Company is permitted to vary rates.

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 20} Sub-heads (a) to (c) **ROHILKUND AND KUMAON RAILWAY SYSTEM—contd.****20 (a) Rohilkund and Kumaon railway proper (3' 3½" gauge)—concl'd.****Statistics of working—**

TABLE I.								TABLE II.		REMARKS.
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Subsidy from Government.	Total income.	Percentage of total income on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.	
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.		
1884	19,10,296	36,543	1,734	0.09	...	1,734	0.09	51	95.16	The large increases in the capital outlay since 1901 are due to the inclusion of expenditure on branches under construction; and the decreases in net earnings to the heavy outlay on relaying the main line and (in 1906) also to the net earnings of the Bareilly-Soron extension having been credited to capital.
1885	21,71,124	2,38,572	40,153	1.85	40,000	80,153	3.69	68	66.49	
1886	22,52,962	3,00,191	88,832	3.92	40,000	1,28,832	5.59	86	58.75	
1887	22,91,619	3,19,274	76,800	3.35	40,000	1,16,800	5.10	92	63.43	
1888	23,40,100	3,31,093	1,02,120	4.36	40,000	1,42,120	6.97	96	57.46	
1889	23,96,624	3,72,270	1,20,135	5.01	40,000	1,60,135	6.69	107	56.98	
1890	20,37,223	3,14,834	1,11,003	5.45	40,000	1,51,003	7.41	90	52.04	
1891	20,40,458	3,85,084	1,33,140	5.62	20,000	1,53,140	7.49	112	58.22	
1892	20,38,573	5,20,567	1,57,780	6.82	40,000	1,97,780	9.61	127	54.17	
1893	20,82,280	4,25,909	1,44,180	6.17	40,000	1,84,180	8.80	124	56.78	
1894	20,89,440	4,59,915	1,75,191	7.16	40,000	2,15,191	10.34	134	52.91	
1895	20,78,251	4,04,504	1,52,973	7.36	...	1,52,973	7.36	118	62.19	
1896	20,79,863	4,26,905	1,54,595	7.43	...	1,54,595	7.43	122	63.79	
1897	21,20,448	4,23,740	1,73,184	8.17	...	1,73,184	8.17	124	59.33	
1898	21,42,552	4,62,308	2,21,899	10.36	...	2,21,899	10.36	135	52.24	
1899	21,48,313	4,55,623	2,31,020	10.89	...	2,31,020	10.89	136	49.74	
1900	21,53,125	4,37,572	2,24,048	10.59	...	2,28,048	10.59	136	48.64	
1901	22,09,423	3,84,314	2,09,896	9.50	...	2,09,896	9.50	112	45.38	
1902	23,31,911	4,19,626	2,18,317	9.34	...	2,18,317	9.34	146	46.83	
1903	25,89,790	4,13,147	2,20,405	8.51	...	2,20,405	8.51	121	46.65	
1904	48,55,575	4,18,787	2,21,103	5.15	...	2,21,103	5.15	122	46.41	
1905	93,34,589	4,40,664	1,54,126	1.65	...	1,54,126	1.65	128	65.02	
1906	1,16,53,319	8,03,697	1,79,124	1.54	...	1,79,124	1.54	124	54.56	

20 (b) Lucknow-Bareilly railway (3' 3½" gauge) —**Details of construction:—**

The open mileage is 237.04 miles, and is divided into main line (Lucknow to Bareilly), 198.55 miles and branches 38.49 miles. Sanction to the construction of the main line was accorded in 1884 and it was opened through in 1891.

Permanent-way—The permanent-way consists of 41½-lb. and 50-lb. steel rails on sal sleepers.

Ballast—The ballast consists of broken bricks, kunkur and shingle.

Fencing—The line is partially fenced.

Curves—There is only one curve with a radius of less than 1,000 feet.

Gradients—The ruling gradient is 1 in 100 except on the Dudhwa branch where it is 1 in 60.

Terms of contracts—

See under Rohilkund and Kumaon railway proper, 20 (a).

Statistics of working—

TABLE I.								TABLE II.					
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Company's share of net earnings.*	Gain or loss to State.	BAREILLY PILGRIM, 3' 3½".		LUCKNOW-SAPUR, SERAMAU, 3' 3½".		LUCKNOW-BAREILLY, 3' 3½".	
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Earnings per mile per week.	Pro. of exp. to earnings.	Earnings per mile per week.	Pro. of exp. to earnings.	Earnings per mile per week.	Pro. of exp. to earnings.
1883	4,84,915	...	...	...	11,192	...	-11,192	...	...	...	...	...	...
1884	13,43,699	10,290	839	0.06	36,572	...	-35,733	32	91.81	...	...	...	...
1885	25,45,567	82,827	17,343	0.63	53,247	...	-36,004	44	83.79	...	...	...	...
1886	42,16,149	1,15,296	28,729	0.68	1,48,570	...	-1,19,841	53	77.46	45	76.29	...	...
1887	52,24,211	2,92,470	67,924	1.30	1,85,046	...	-1,17,122	53	71.47	46	73.49	...	...
1888	52,84,870	3,52,327	99,031	1.87	2,03,503	...	-1,04,472	50	70.31	47	70.81	...	...
1889	51,59,585	4,24,781	1,47,868	2.70	2,16,189	...	-68,321	59	66.45	59	65.10	...	...
1890	65,33,824	4,56,738	1,32,358	2.02	2,30,690	...	-98,361	64	66.08	62	72.78	...	...
1891	79,17,846	4,95,068	1,73,011	2.19	2,72,065	...	-99,054	...	...	...	...	56	65.03
1892	81,66,804	6,82,836	2,74,601	3.36	3,07,651	11,501	-44,551	...	...	...	...	66	59.72
1893	83,89,362	7,28,878	2,73,541	3.26	3,26,770	2,135	-55,364	...	...	...	...	67	62.29
1894	85,93,058	9,72,269	4,48,218	5.22	3,45,323	79,310	+23,585	...	...	...	...	87	50.25
1895	87,22,466	8,25,934	3,13,116	3.59	3,50,595	15,834	-59,314	...	...	...	...	74	61.90
1896	89,63,620	8,27,599	3,02,071	3.37	3,48,885	13,415	-60,229	...	...	...	...	75	63.32
1897	93,02,715	8,27,371	3,35,776	3.61	3,61,550	26,980	-52,754	...	...	...	...	69	50.42
1898	94,90,476	10,34,088	5,00,200	5.27	3,64,852	66,721	+68,677	...	...	...	...	94	51.63
1899	91,97,485	12,72,160	6,33,355	6.63	3,65,537	76,332	+1,91,446	...	...	...	...	114	50.21
1900	99,21,432	12,53,861	6,51,957	6.57	3,73,097	1,47,611	+1,31,249	...	...	...	...	107	48.72
1901	1,01,83,243	13,72,520	7,58,124	7.44	3,91,796	99,195	+2,67,133	...	...	...	...	123	44.76
1902	1,12,96,019	14,53,829	7,69,568	6.81	4,23,528	71,666	+2,74,374	...	...	...	...	182	47.05
1903	1,15,01,911	14,03,266	7,48,689	6.51	4,53,835	52,573	+2,42,291	...	...	...	...	126	46.65
1904	1,17,14,505	14,96,129	7,97,671	6.81	4,48,328	54,487	+2,91,856	...	...	...	...	133	46.68
1905	1,17,99,857	15,47,488	8,20,992	6.96	4,50,448	16,811	+3,53,733	...	...	...	...	138	46.95
1906	1,20,09,658	16,55,250	8,36,782	6.97	4,575,88	1,20,140	+2,59,054	...	...	...	...	148	49.45

* Based on actual receipts and payments during the year.

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 20} _{Sub-heads (a) to (c)} **ROHILKUND AND KUMAON RAILWAY SYSTEM—concl'd.****20 (c) Powayan Light railway (2' 6" gauge)—**

The line was constructed originally by the Powayan Steam Tramway Company and the maintenance and working were taken over by the Rohilkund and Kumaon Railway Company from 17th December 1900.

Details of construction—

This line, which connects Shahjahanpur with Mailani, is 39.50 miles long. Its construction was first sanctioned in 1889 and it was opened through in 1894.

Permanent-way.—The permanent-way consists of flat-footed steel rails, weighing 25 lbs. to the yard, laid on sal sleepers.

Ballast.—The line is ballasted with earth.

Fencing.—The line is unfenced except at stations.

Curves.—There are no curves with a radius of less than 1,600 feet.

Gradients.—The ruling gradient is 1 in 100.

Terms of contracts—

The Powayan Light railway is worked under the following contracts:—

Contracts of—1st July 1901 (between the Secretary of State and the Powayan Light Railway Company) for maintenance and working.

6th November 1902 (between the Secretary of State and the Rohilkund and Kumaon Railway Company) as to terms of working.

The general conditions of the contracts are as follows:—

Government aid.—Land.

Currency of contract.—The contract is terminable on the 31st December 1912 or at any time thereafter on one year's notice being given by either party.

Terms of working.—The working agency is to retain 70 per cent. of the gross earnings until the line is fully equipped, and thereafter the same percentage as that at which the whole open system is worked, subject to a minimum of 60 per cent. The percentage so retained may include any single item of capital expenditure not exceeding Rs. 200, subject to a maximum charge of Rs. 20 per mile in each half year.

Rates and fares.—The same rates and fares as may from time to time be applicable to the Lucknow-Bareilly railway.

Statistics of working.—

TABLE I.					TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1901	8,41,038	66,862	29,959	2.59	33	70.00
1902	8,93,456	73,675	22,521	2.52	37	70.21
1903	8,94,619	71,815	28,482	3.18	35	60.34
1904	8,91,751	78,615	30,937	3.46	38	60.34
1905	8,91,751	92,614	36,707	4.10	45	60.37
1906	8,91,751	99,566	39,491	4.41	48	60.34

Number ^{Main head 21} _{Sub-heads (a) to (f)} **SOUTH INDIAN RAILWAY SYSTEM—**

Chairman.—Sir Herry Kimber, Bart, M. P.

Managing Director.—Henry W. Notman, Esq.

Offices.—55, Grace Church Street, London, E. C.

Lines comprising the system.—The South Indian railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(a) South Indian railway (3' 3½" gauge)	1,131.00	13.88	1,143.88
(b) Karaikkal-Porulam railway (3' 3½" gauge)	14.65	...	14.65
(c) Pondicherry railway (3' 3½" gauge)	7.85	...	7.85
(d) Tanjore District Board railway (3' 3½" gauge)	103.83	...	103.86
(e) Tinnevely-Quilon (Travancore) (British section) (3' 3½" gauge)	50.43	...	50.43
(f) Tinnevely-Quilon (Travancore) (Native state section) (3' 3½" gauge)	57.98	...	57.98
Total	1,364.32	13.88	1,378.20

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 112.]

Number ^{Main head 21}
_{Sub-heads (a) to (j)} **SOUTH INDIAN RAILWAY SYSTEM—*contd.***

21 (a) South Indian railway proper (3' 3½" gauge)—**Details of construction—**

The total open mileage of the South Indian railway proper is 1,130·00 miles. This may be divided into (1) *Madras-Tuticorin section*, main line (Madras to Tuticorin), 416·54 miles; branches, 320·18 miles; (2) *Villupuram-Dharmavaram section*, main line (Villupuram to Dharmavaram), 279·18 miles; Gudur branch, 84·10 miles. First sanction to the construction of (1) was given in 1859 and it was opened through in 1879. (2) was sanctioned in 1888 and opened through in 1892.

In addition to the above there are 13·88 miles under construction.

Permanent-way.—The rails in use are 50-lb. and 52-lb. bull-headed steel, 56-lb. and 41½-lb. flat-footed steel, 40·3-lb. flat-footed and 68-lb. double-headed iron. The sleepers are cast iron pot, steel transverse, Denham Olpherts' cast iron and wooden.

Ballast.—The line is ballasted throughout, partly with broken stone and partly with laterite and gravel interspersed.

Fencing.—The line is fenced, with the exception of the Villupuram-Dharmavaram and Pakala-Gudur sections and the Pamban branch which are fenced only at stations.

Curves.—The sharpest curve is of 500 feet radius.

Gradients.—The ruling gradient is 1 in 200, except on the length between Madras Beach and Fort and on the Villupuram-Dharmavaram, Pakala-Gudur, Trichinopoly-Madura, and Karur-Erode sections where it is 1 in 100.

Terms of contracts—

The railway is worked under the following contracts:—

Contracts of—24th November 1890 (between the Secretary of State and the South Indian Railway Company) for working.

27th June 1901 (between the Secretary of State and the South Indian Railway Company) relating to the Pamban branch.

The general conditions of the contracts are as follows:—

Terms of contract.—The original South Indian Railway Company ceased to exist at the end of 1890, when the railway was purchased by the State. The purchase was effected by means of a cash payment to the Company, and all the contracts then subsisting between the Secretary of State and the Company were determined. The purchase price was £4,197,557.* The Secretary of State assumed all liability in connection with the Company's debentures and debenture stock which is irredeemable. The present Company (practically the old one in a modified form) was constituted, with a capital of £1,000,000, as the agency for carrying on the working of the lines after their acquisition by the Government, and for completing a system of State lines which was under construction by the former Company at the date of the termination of its contract. Any further moneys required are provided either by the Secretary of State or raised by the Company under guarantee. Subject to the provision of the contract, all moneys raised by the Company become the absolute property of the Secretary of State.

Company's stock at date of purchase	£ 3,208,289
Premium	989,277
	<u>4,197,557</u>

Currency of contract.—Government may determine the contract on the 31st December 1910 or at the end of any succeeding fifth year, giving 12 months' previous notice. Government may also determine it by giving six months' notice should the Company fail to observe its obligations or the line be worked at a loss for not less than three half-years continuously. On the expiration of the contract Government are to take possession of the railway and all its appliances, repaying at par to the Company its capital of £1,000,000 and any further capital raised by it and paid to Government.

Power of Company to surrender contract.—Nil.

Terms of working.—After deducting working expenses (which shall include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year, and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government) the net receipts shall be applied in payment to Government of the equivalent in rupees of interest at 3 per cent. on £1,000,000, the Company's capital; at 4½ per cent. on £425,000, the irredeemable debenture stock of the old Company; at 3½ per cent. on the debenture stock issued and upon the principal moneys owing in respect of advances made for the Pamban branch; and 3 per cent. on the net expenditure shown by the capital advance, stores and capital accounts. After deducting the equivalent in rupees of the sums referred to above, the residue, if any, to be divided between Government and the Company in the ratio of the respective capital amounts contributed by each.

Rates and fares.—Certain maxima and minima have been fixed within which the Company is permitted to vary rates.

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 21} _{Sub-heads (a) to (f)} SOUTH INDIAN RAILWAY SYSTEM—contd.

21(a) South Indian railway proper (3' 9½" gauge)—concl'd.

Statistics of working—

TABLE I [INCLUDING THE TINNEVELLY-QUILON (TRAVANCORE) RAILWAY (BRITISH AND NATIVE STATE SECTIONS) UP TO 1904].								TABLE II [INCLUDING THE PONDICHERRY RAILWAY UP TO 1904].					
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Company's share of net earnings *	Gain or loss to the State.	Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings	Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.		Rs.			Rs.	
1879	4,41,96,588	33,62,067	10,63,953	2.40	20,95,296	...	-10,31,953	1861	77	47.45	1897	118	68.20
1880	4,46,77,075	35,59,593	9,30,017	2.08	21,28,643	...	-11,98,626	1862	61	44.43	1888	159	68.08
1881	4,52,22,730	37,55,688	12,37,724	2.73	21,30,568	...	-8,92,842	1863	71	44.60	1889	167	70.11
1882	4,53,69,280	37,58,714	11,02,328	3.09	21,40,871	...	-7,38,543	1864	69	57.55	1890	181	57.50
1883	4,53,97,614	38,69,668	13,22,334	2.91	21,46,579	...	-8,24,245	1865	79	49.53	1891	151	65.47
1884	4,67,51,662	41,89,049	11,92,191	3.19	25,10,471	...	-10,47,989	1866	106	49.28	1892	137	63.01
1885	4,93,74,900	45,60,126	15,81,714	3.20	27,02,145	...	-11,20,431	1867	86	49.66	1893	149	61.25
1886	5,15,10,172	49,20,176	14,75,914	2.86	29,80,496	...	-15,04,582	1868	90	48.64	1894	118	58.99
1887	5,10,64,399	51,79,324	15,86,729	2.89	31,25,720	...	-15,18,991	1869	84	61.14	1895	165	56.13
1888	5,57,01,978	56,58,683	16,31,692	2.92	33,80,057	...	-17,48,965	1870	84	62.10	1896	165	54.89
1889	6,25,01,678	59,39,378	17,63,111	2.82	35,29,935	...	-17,66,824	1871	84	55.61	1897	170	53.01
1890	7,27,15,494	64,25,510	26,67,305	3.66	35,19,564	1,43,341	-9,95,609	1872	87	56.87	1898	157	54.50
1891	7,72,11,805	70,36,756	23,58,724	3.05	35,89,736	...	-12,31,012	1873	129	48.99	1899	159	52.41
1892	7,82,84,761	77,14,996	27,77,065	3.55	39,54,091	...	-11,74,088	1874	161	60.81	1900	166	50.27
1893	7,63,31,043	80,92,415	30,31,332	3.98	38,98,152	...	-8,25,820	1875	96	48.16	1901	188	46.17
1894	7,64,13,362	80,16,559	32,83,865	4.30	42,81,512	1,06,449	-11,64,396	1876	90	53.27	1902	189	45.60
1895	7,68,38,604	89,14,947	38,96,987	5.07	42,77,375	2,58,771	-6,14,862	1877	107	50.88	1903	203	39.99
1896	7,67,63,325	89,15,581	40,27,489	5.01	49,69,674	2,41,567	-2,84,755	1878	102	66.65	1904	214	44.35
1897	7,66,46,858	91,81,199	42,96,757	5.61	38,76,142	3,55,930	+95,225	1879	105	68.38	1905	221	49.51
1898	7,45,21,873	84,67,581	38,25,527	5.15	37,49,529	3,06,473	-2,20,467	1880	106	73.87	1906	227	55.61
1899	7,53,82,623	84,74,462	39,83,540	5.28	36,39,891	2,17,608	+98,041	1881	109	67.04			
1900	7,69,70,119	89,04,825	43,97,916	5.71	36,77,579	3,08,408	+3,51,629	1882	109	62.69			
1901	8,23,78,918	1,01,44,657	54,15,176	6.57	37,35,736	4,59,510	+12,31,990	1883	112	65.73			
1902	8,49,97,226	1,05,98,282	57,11,244	6.72	39,64,367	4,80,185	+12,69,702	1884	122	64.18			
1903	8,69,72,113	1,23,82,517	73,77,614	8.48	40,28,063	6,96,450	+26,54,126	1885	132	65.12			
1904	10,01,55,636	1,28,18,085	71,16,981	7.11	45,90,992	7,05,488	+18,20,501	1886	113	69.78			
1905	8,62,95,191	1,29,34,476	65,77,330	7.62	27,03,867	6,52,963	+32,15,497						
1906	8,91,97,605	1,32,75,295	58,92,976	6.62	27,89,511	5,66,743	+25,66,752						

21(b) Karaikkal-Peralam railway (3' 3½" gauge)—

The line is partly in British, and partly in French, territory and was constructed (by the agency of the South Indian Railway Company) with the object of placing the town and port of Karaikkal in communication with the railway system of Southern India.

Details of construction—

The line is 14.65 miles long. Its construction was sanctioned in 1895 and it was opened in 1898.

Permanent-way.—The permanent-way consists of 11½-lb flat-footed steel rails laid on wooden and steel transverse sleepers.

Ballast.—The line is ballasted with laterite.

Fencing.—The line is fenced only at stations.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 200.

Terms of contract—

The railway is worked under the following contract :—

Contract of—27th March 1902 (between the Government of the French Settlements in India and the South Indian Railway Company) for working.

The general conditions of the contract are as follows :—

Government aid.—The land occupied by the portion in British territory has been made over by the British Government free of cost on condition that the proprietary rights remain vested in the British Government.

Currency of contract.—The contract is terminable by either party giving twelve months' notice to expire on the 30th June or 31st December in any year.

Terms of working.—The line is worked for the same percentage of working expenses to gross earnings as obtains on the undertaking, plus 5 per cent. of the gross receipts of the line for the use of the main line rolling-stock and Rs. 1,500 per annum for interest on the main line Revenue stores and Stores and Workshop buildings and machinery. If, at any time, the Company can show that the working of the railway involves an actual loss on the percentage term, the Government of the French Settlements in India have to make good the loss.

Rates and fares.—Same as on the South Indian railway.

* Based on actual receipts and payments during the year.

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number Main-head 21
Sub-heads (a) to (f) . SOUTH INDIAN RAILWAY SYSTEM—contd.

21(b) Karaikkal-Peralam railway (3' 3½" gauge)—concl'd.

Statistics of working—

Calendar year.	TABLE I.				TABLE II.	
	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1895	4,759	...	...	...	...	...
1896	59,009	...	...	...	...	...
1897	5,93,082	...	...	...	...	...
1898	7,21,665	19,733	7,855	1.09	27	60.19
1899	7,25,344	27,685	9,037	1.25	37	67.86
1900	7,29,715	24,608	9,178	1.30	32	61.48
1901	7,23,786	30,150	13,314	1.81	40	56.28
1902	7,23,786	32,736	14,619	2.02	43	55.34
1903	7,23,786	38,933	19,861	2.74	51	48.98
1904	7,23,786	36,945	—29,432	...	48	179.66
1905	7,23,786	36,922	4,406	0.61	48	88.07
1906	7,23,786	39,635	—4,420	..	51	111.32

21(c) Pondicherry railway (3' 3½" gauge)—

The line is in French territory and was constructed (by the Pondicherry Railway Company under the supervision of the South Indian railway) with the object of placing the town and port of Pondicherry in communication with the railway system of Southern India and of developing the resources of the French territory.

Details of construction—

The line is 7.85 miles long. Its construction was sanctioned in 1878 and it was opened in 1879.

Permanent-way.—The line is laid with 50-lb. bull-headed steel rails on cast iron pot sleepers and with 41½-lb. flat-footed steel rails on wooden sleepers.

Ballast.—The line is ballasted with stone.

Fencing.—The line is fenced.

Curves.—The sharpest curve is of 495 feet radius.

Gradients.—The ruling gradient is 1 in 200.

Terms of contract—

The railway is worked under the following contract :—

Contract of.—30th December 1890 (as renewed, between the South Indian Railway Company and the Pondicherry Railway Company) for working the line.

The general conditions of the contract are as follows :—

Currency of contract.—The contract will be terminable by either party on giving 6 months' notice expiring on the 31st December in any year.

Terms of working.—The line is worked for the same percentage of gross receipts as obtains on the undertaking including the Pondicherry railway.

Rates and fares.—Same as on the South Indian railway

Statistics of working—

Calendar year.	TABLE I.				TABLE II.	
	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1879 } to 1889 }	Information	Rs. not available.	Rs.		Rs.	
1890	5,68,543	Included with the South Indian railway proper.	
1891	5,68,543	20,106	20,107	3.54		
1892	5,68,543	15,341	15,341	2.70		
1893	5,68,543	18,014	18,014	3.17		
1894	5,68,543	27,958	18,425	3.24		
1895	5,68,543	50,323	22,711	3.99		
1896	5,68,543	39,681	17,776	3.13		
1897	5,68,543	36,592	17,169	3.02		
1898	5,68,543	31,830	14,394	2.53		
1899	5,68,543	45,305	21,627	3.80		
1900	5,68,543	59,583	23,193	4.08	143	48.94
1901	5,68,543	60,174	32,366	5.69		
1902	5,68,543	70,478	37,960	6.08		
1903	5,68,543	73,416	44,258	7.78		
1904	5,68,543	60,119	33,662	5.92		
1905	5,68,543	58,414	29,827	5.13		
1906	5,68,543	55,026	24,536	4.92	135	55.41

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 21} _{Sub-heads (a) to (j)} **SOUTH INDIAN RAILWAY SYSTEM—contd.**

21(d) Tanjore District Board railway (3' 3½" gauge)—

This railway was constructed by the agency of the South Indian Railway Company, and the money for the railway was raised by the imposition, with the concurrence of the inhabitants or their representatives on the District Board, of a special cess of 3 pies in the rupee on all lands which would be served by the railway or benefited by its construction. It was entirely a new departure, and has opened the way for the provision of railways for which Government are unable to find the money immediately when the District Board has raised sufficient capital from its cess.

Details of construction—

The open mileage (Mayavaram to Arantangi), including the quarry branch is 193·36 miles. Construction was first sanctioned in 1890 and the line was opened through in 1903.

Permanent-way.—The line is laid with 41½-lb. flat-footed steel and 40·3-lb. flat-footed iron rails on sāl, pyinkado, west coast teak and jarrah sleepers.

Ballast.—The Mayavaram-Mutupet section is ballasted with laterite and the Mutupet-Arantangi section is being ballasted with laterite over sand.

Fencing.—The line is fenced only at stations.

Curves.—The sharpest curve is of 1,146 feet radius.

Gradients.—The ruling gradient is 1 in 200, except between Adirampatnam and Pattukkottai where it is 1 in 160.

Terms of contract—

The railway is worked under the following contract:—

Contract of—22nd July 1897 (between the Secretary of State and the South Indian Railway Company) for working.

The general conditions of the contract are as follows:—

Government aid.—Land was provided free of cost.

Terms of contract.—The funds for the Mayavaram-Mutupet section were in the first instance provided in equal proportions by the Government of Madras from Provincial Revenues and by the Tanjore District Board from its railway guaranteed fund created by a special local cess. On the 1st January 1900 the Tanjore District Board took over the Government section and became sole owners—the purchase money, Rs. 12,34,720, being treated as a loan at 4 per cent. per annum. The extension of the line was carried out by the South Indian Railway Company at the cost of the Tanjore District Board.

Currency of contract.—Contract to remain in force until either party gives 12 months' notice expiring on the 31st December in any year. The Government of India reserve the right of taking over the whole of the railway at any time, on 12 months' notice, by assuming liability for any debentures which the District Board may have issued and by repayment of any further amounts which it may have spent out of its railway guaranteed fund. Under ordinary circumstances this condition will not be enforced up to 31st December 1920 (Government of India No 303 R. C., dated 5th March 1898).

Terms of working.—The line is worked for the same percentage of gross receipts as obtains on the undertaking (which shall include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year), plus 5 per cent. of the gross receipts of the line for use of rolling-stock.

Rates and fares.—To be agreed upon from time to time between Government and the Company within the maxima and minima in force on the undertaking.

Statistics of working—

Calendar year.	TABLE I.						TABLE II.	
	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1890	61,509	...	...	...	1,230	—1,230	...	...
1891	4,82,149	...	...	...	10,873	—10,873	...	...
1892	13,84,423	...	...	...	37,331	—37,331	...	...
1893	21,62,937	...	...	...	70,947	—70,947	...	...
1894	23,79,124	1,63,460	62,942	2·65	1,00,701	—37,759	103	61·50
1895	24,47,458	2,42,024	93,669	3·83	95,760	—2,031	86	61·30
1896	24,49,680	2,47,772	99,361	4·06	97,861	+1,100	88	59·00
1897	24,91,854	2,66,081	1,11,496	4·47	99,159	+12,337	95	58·10
1898	24,94,905	2,46,199	77,627	3·11	99,843	—22,216	88	68·47
1899	24,97,355	2,42,016	96,798	3·88	99,815	—3,047	86	60·01
1900	26,50,776	2,32,280	97,582	3·69	1,02,734	—4,952	83	53·02
1901	32,17,511	2,90,637	1,35,765	4·22	1,39,831	—3,076	109	53·29
1902	38,14,262	3,08,879	1,46,764	3·84	1,63,157	—16,393	103	52·48
1903	45,70,190	3,90,747	2,09,167	4·58	1,97,476	+11,691	106	46·47
1904	46,32,763	5,24,490	2,61,364	5·64	2,25,868	+35,496	101	50·17
1905	47,33,000	5,66,680	2,65,302	5·61	2,21,234	+44,063	113	54·78
1906	47,98,375	6,01,066	2,32,833	4·85	2,34,640	—1,813	116	61·26

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112]

Number Main head 21 **SOUTH INDIAN RAILWAY SYSTEM—concl'd.**
Sub-heads (a) to (f)

21(e) Tinnevelly-Quilon (Travancore) (British section) (3' 3½" gauge)—**Details of construction—**

The line is 50.48 miles long. Its construction was sanctioned in 1899 and it was opened in 1903.

Permanent-way.—The line is laid with 50-lb. bull-headed steel rails on cast iron pot sleepers.

Ballast.—The line is ballasted throughout with broken stone.

Fencing.—The line is fenced at stations, and at a few places where it runs close to villages and public roads.

Curves.—The sharpest curve is of 1,432.5 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Terms of contract—

The Travancore branch is worked under the following contract :—

Contract of—27th June 1901 (between the Secretary of State and the South Indian Railway Company) for working.

The general conditions of the contract are as follows :—

Government aid.—Government guarantee interest at 3½ and 3¼ per cent. on the debentures to be raised by the South Indian Railway Company for the construction of the line.

Currency of contract.—The contract will remain in force until the principal contract for working the undertaking shall terminate.

Terms of working.—The branch is to be worked for the same percentage of working expenses to gross earnings as obtains on the undertaking, subject to maintenance for the first two years after opening being charged to capital. After meeting interest charges, the residue of net earnings to be divided between the Secretary of State and the Company in the proportions in which the residue of net revenue receipts of the undertaking are divisible under the principal contract. If the net earnings are not sufficient to meet interest charges of any half-year, the deficiency attributable to the section of railway within the Native State of Travancore to be borne by the Secretary of State, and that attributable to the section of railway outside the Native State to be borne by the Secretary of State and the Company in the proportions in which the residue of such net revenue receipts would have been divisible between them had there been any such residue.

As between Government and the Native State of Travancore the latter has under-written the guarantee of interest to the extent of the capital required for the construction of the line lying in its State, any excess of net earnings over interest charges attributable thereto being made over to and any deficiency being met by the Native State.

Rates and fares.—Same as on the South Indian railway.

Statistics of working—

TABLE I.													TABLE II.		
Calendar year.	CAPITAL OUTLAY TO END OF EACH YEAR.		GROSS EARNINGS.	NET EARNINGS.		PER CENT. ON CAPITAL OUTLAY.		INTEREST CHARGES.		GAIN OR LOSS.			(INCLUDING THE NATIVE STATE SECTION.)		
	British section.	Native State section.		British section.	Native State section.	British section.	Native State section.	British section.	Native State section.	British section.		Native State section.	Earnings per mile per week.	Proportion of expenses to earnings.	
										South Indian Railway Company.	State.				
Rs.	Rs.	Rs.	Rs.	Rs.	...	...	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
1902	Included	with the South Indian	railway proper	...	...	...	...	...	...	...	...	81	44.84	
1903														101	41.18
1904														55	51.04
1905	43,40,925	1,17,84,077	4,86,757	68,314	1,80,963	1.57	1.54	1,49,273	3,99,750	—13,234	—67,695	—2,18,787	86	48.78	
1906	43,62,295	1,18,26,747	4,97,648	61,824	1,60,655	1.42	1.36	1,49,700	3,98,235	—3,939	—73,917	—2,34,270	88	55.29	

21(f) Tinnevelly-Quilon (Travancore) Native State section (3' 3½" gauge)—**Details of construction—**

The Native State section is 57.98 miles long. Its construction was sanctioned in 1899 and it was opened through in 1904.

Permanent-way.—The line is laid with 50-lb. bull-headed steel rails on cast iron pot sleepers, except for a length of 24.56 miles, between Ponalur and Shencottah, where there are wooden sleepers of jarrah, irul and teak.

Ballast.—The line is ballasted throughout with broken stone.

Fencing.—The line is fenced only at stations and at a few places where it runs close to villages and public roads.

Curves.—The sharpest curve is of 477 feet radius.

Gradients.—The ruling gradient between Quilon and Ponalur is 1 in 100 and between Ponalur and Shencottah 1 in 50.

Terms of contract—

The line is worked on the same terms as apply to the Tinnevelly-Quilon (Travancore) British section [21 (e)].

Statistics of working—

See under British section [21 (e)]

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 22 **SOUTHERN MAHRATTA RAILWAY SYSTEM—**
Sub-heads (a) to (m).

Chairman.—Colonel Sir William S. S. Bisset, R.E., K.C.I.E.*Secretary.*—E. Z. Thornton, Esq.*Offices.*—46, Queen Anne's Gate, S. W.**Lines comprising the system.**—The Southern Mahratta railway system is made up of—

	Open line.	Under construc- tion or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(a) Southern Mahratta railway (3' 3½" gauge)	1,042·04	...	1,042·04
(b) Bellary-Rayadrug railway (3' 3½" gauge)	33·35	...	33·35
(c) Birur-Shimoga railway (3' 3½" gauge)	37·92	...	37·92
(d) Guntakal Mysore frontier railway (3' 3½" gauge)	119·50	...	119·50
(e) Hindupur (Yasvantpur-Mysore frontier) railway (3' 3½" gauge)	51·35	...	51·35
(f) Hospet-Kottur railway (3' 3½" gauge)	48·03	...	48·03
(g) Kolhapur railway (3' 3½" gauge)	29·27	...	29·27
(h) Mysore-Nanjangud railway (3' 3½" gauge)	15·80	...	15·80
(i) Mysore section (Southern Mahratta) (3' 3½" gauge)	296·22	...	296·22
(j) West of India Portuguese railway (3' 3½" gauge)	51·10	...	51·10
(k) Bezwada Masulipatam railway (3' 3½" gauge) . . . . .	...	49·47	49·47
(l) Kurnool Road-Kurnool railway (3' 3½" gauge) . . . . .	...	32·00	32·00
(m) Sangli railway (3' 3½" gauge) . . . . .	...	5·77	5·77
Total	1,724·53	87·24	1,811·82

Running powers—*Home line over foreign line—*

Tadepalli to Bezwada, Madras railway (South East line) for passenger and goods trains 2·97

22(a) Southern Mahratta railway proper (3' 3½" gauge)—**Details of construction—**

The open mileage of the Southern Mahratta Railway proper is 1,042·04 miles. This may be divided into (1) main line (Portuguese frontier to Tadepalli) 509·97 miles, and (2) branches, 532·07 miles. Construction was first sanctioned in 1879 and the main line was opened through in 1890.

Permanent-way.—The rails in use are of 41½-lb., 50-lb. and 62-lb flat-footed steel. The sleepers are teak, jamba and steel trough.

Ballast.—The line is ballasted throughout the main line and Poona branch with stone, gravel and sand; the Harihar branch with stone, and the Bijapur branch with stone and gravel.

Fencing.—The line is only partially fenced.

Curves.—The sharpest curve on the main line is of 603 feet radius. The sharpest curve on the Poona branch is of 600 feet radius.

Gradients.—The ruling gradient is 1 in 100, except on the Ghats, between miles 0 and 3 on the main line, where the gradient is 1 in 40.

Terms of contracts—

The Southern Mahratta railway is worked under the following contracts:—

Contract of—1st June 1882.—Southern Mahratta Railway Company's principal contract.

28th October 1885.—Contract supplemental to that of 1882, for construction and working of the West Deccan railway.

31st August 1887.—Contract supplemental to those of 1882 and 1885, for construction and working of a line from Ranibennur to Harihar and a line from Bellary to Guntakal.

27th February 1889.—Contract supplemental to those of 1882, 1885 and 1887, for completion and working of the Bellary-Kistna railway.

The general conditions of the contracts are as follows:—

Government aid.—Interest in sterling on share capital at 3½ per cent. is guaranteed, and an additional ¼ per cent. until 31st December 1890.

Terms of contract.—The contract provides that the Company raise £5,000,000, and that any further moneys required shall be supplied by the Secretary of State.

Currency of contract.—The contract is current for a period of 50 years. Government may however determine the contract after 25, 35 or 45 years (i.e., on 30th June 1907, 30th June 1917, or 30th June 1927), on one year's previous notice; or on six months' notice given at any time if the Company fails to observe its obligations, or the line is worked at a loss for three consecutive half-years. Upon determination of the contract by efflux of time or by notice Government have to repay to the Company the amount of the par value of the share capital paid to Government.

NOTE.—On the 21st June 1906 the Secretary of State for India gave notice of his intention to determine on the 30th June 1907, the contract of the 1st June 1882 and all contracts supplemental thereto. But he has since permitted the Company to continue the working as at present up to 30th June 1906.

Power of Company to surrender contracts.—The Company may determine the contracts on the 30th June in any year by giving one year's previous notice.

APPENDIX 38—*contd.**History of railways constructed and in progress.*

[For Index see page 112.]

Number ^{Main head 22}
_{Sub-heads (a) to (m)} **SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.*****22(a) Southern Mahratta railway proper (3' 3½" gauge)—*concl'd.*****Terms of contracts—*concl'd.***

Terms of working.—Up to the 31st December 1890 after deducting working expenses (which may include any single item of capital expenditure not exceeding Rs. 1,000, or if exceeding Rs. 1,000 but not exceeding Rs. 2,000, classed as a 'Minor work,' subject to a maximum charge on such account of Rs. 23,000 in each half-year and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision), the net receipts belonged to Government, unless one-fourth part of the same exceeded the extra guarantee of ½ per cent., in which case the amount of the excess was payable to the Company. After 31st December 1890 three-fourths of the net receipts are paid to Government and one-fourth to the Company.

Rates and fares.—To be fixed from time to time by the Company with the approval of Government.

Statistics of working—

Calendar year.	TABLE I.							TABLE II.	
	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Company's share of net earnings.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1884	2,77,07,721	2,13,059	—18,131	...	15,77,195	...	—14,95,327	50	108·51
1885	3,68,00,076	8,66,226	1,40,238	0·38	19,81,340	...	—18,41,102	63	83·80
1886	6,15,07,620	16,31,918	4,88,302	0·79	26,43,220	...	—21,54,828	92	69·83
1887	7,87,73,165	30,32,417	10,03,624	1·27	34,64,086	...	—24,60,462	87	66·01
1888	8,68,84,288	35,38,616	8,85,493	1·01	31,89,505	...	—23,04,012	86	75·70
1889	9,18,52,138	40,31,604	9,01,618	1·04	32,91,520	41,700	—23,71,602	88	76·15
1890	9,82,85,016	44,71,095	9,14,664	0·98	31,39,444	30,036	—22,54,816	85	78·19
1891	9,42,66,041	47,60,567	16,29,919	1·72	35,59,851	2,58,845	—22,18,777	89	65·76
1892	9,61,10,671	44,33,107	13,47,959	1·40	37,55,511	3,43,266	—21,80,778	82	68·69
1893	9,45,71,662	57,29,918	23,16,567	2·45	35,42,479	5,84,949	—17,60,861	106	59·60
1894	9,51,44,496	54,50,542	20,18,567	2·12	45,87,598	5,57,556	—31,26,587	108	65·44
1895	9,56,02,591	64,68,011	25,88,948	2·71	46,80,290	5,22,407	—26,13,740	119	59·65
1896	9,60,94,786	67,12,230	29,11,959	3·03	44,45,740	7,23,698	—22,57,479	124	56·59
1897	9,67,12,838	64,92,310	27,82,625	2·88	42,62,886	6,97,133	—21,77,394	119	58·96
1898	9,74,67,550	50,61,871	15,02,414	1·54	41,10,275	5,44,277	—31,52,138	93	70·32
1899	9,78,60,560	58,70,616	18,95,902	1·94	40,10,557	3,85,332	—25,00,887	108	67·73
1900	9,82,62,274	64,66,526	22,83,366	2·32	40,02,119	5,81,807	—23,00,560	119	64·69
1901	9,84,64,118	58,29,471	17,31,134	1·75	40,42,851	4,92,728	—28,04,445	107	70·38
1902	9,85,13,731	64,50,686	23,09,908	2·34	40,79,645	5,03,168	—22,72,905	119	64·24
1903	9,88,51,177	66,72,302	25,50,721	2·58	40,94,983	6,01,133	—21,45,393	123	61·77
1904	9,91,33,895	73,48,458	26,97,722	2·72	41,08,930	7,20,960	—21,32,168	135	63·29
1905	10,13,29,322	76,67,700	30,16,473	2·98	41,37,632	6,20,764	—17,41,923	141	60·66
1906	10,16,96,345	82,82,914	33,10,570	3·26	42,08,005	8,76,167	—17,73,602	152	60·03

22(b) Bellary-Rayadrug railway (3' 3½" gauge)—

The construction of the Bellary-Rayadrug railway by the agency of the Southern Mahratta Railway Company was sanctioned with the object of increasing facilities for distributing food to the population in the Madras Presidency and of lessening the difficulties and troubles incidental to the periods of scarcity.

Details of construction—

The line is 33·35 miles long. It was sanctioned in 1902 and opened in 1905.

Permanent-way.—The permanent-way consists chiefly of flat-footed steel rails, weighing between 41½ and 39 lbs. per yard, laid on teak, jamba and Australian eucalyptus sleepers.

Ballast.—The ballast consists of broken stone, sand and moorum.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 573 feet radius.

Gradients.—The ruling gradient is 1 in 60.

Terms of contract—

The line is worked under an agreement (between the Secretary of State and the Southern Mahratta Railway Company) sanctioned under Government of India, Public Works Department (Railways) No. 1144 R. T., dated the 26th December 1904.

The general conditions of the agreement are as follows :—

Government aid.—The line is the property of Government.

Currency of agreement.—The agreement is terminable at the close of any calendar half-year on twelve months' notice being given by either party.

Terms of working.—Actual cost with a lump sum charge of 11½ annas per train-mile for locomotive and carriage and wagon expenses and for traffic expenses connected with subordinate superintendence, train staff, lighting and general stores, clothing, printing, stationery and tickets.

Rates and fares.—To be fixed from time to time by the Company with the approval of Government.

* Based on actual receipts and payments during the year.

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 22} _{Sub-heads (a) to (m)} SOUTHERN MAHRATTA RAILWAY SYSTEM—contd.

22(b) Bellary-Rayadrug railway (3' 3½" gauge)—concl'd.

Statistics of working—

Calendar year.	TABLE I.						TABLE II.	
	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage of net earnings on capital outlay.	Interest.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1905	7,70,179	17,010	—2,864	...	14,102	—16,966	19	116.81
1906	7,78,472	37,918	2,535	0.33	26,771	—24,236	22	93.32

22(c) Birur-Shimoga railway (3' 3½" gauge)—

Details of construction—

The line is 37.92 miles long. Its construction was sanctioned in 1896 and it was opened in 1899.

Permanent-way.—The permanent-way consists of 41½-lb. flat-footed steel rails on Mysore teak sleepers. The Bhadra bridge is laid with 50-lb. flat-footed steel rails.

Ballast.—The line is ballasted throughout with stone and sand.

Fencing.—The line is unfenced except for a very short length.

Curves.—The sharpest curve is of 1,500 feet radius.

Gradients.—The ruling gradient is 1 in 89.

Terms of contract—

The Hindupur and Birur-Shimoga railways are worked under the following contract :—

Contract of.—2nd December 1899 (between His Highness the Maharaja of Mysore and the Southern Mahratta Railway Company) for maintenance and working.

The general conditions of the contract are as follows :—

Government aid.—The lines are the property of the Mysore State.

Currency of contract.—Either party may determine the contract, on giving twelve months' notice, on the 31st December 1904, or on the 1st January or 1st July in any year thereafter. If not determined sooner, the agreement terminates, without prior notice, on the date the Mysore contract of the 31st August 1887 terminates. On the determination of the contract the Mysore Government resume possession of the railway and take over the liabilities incurred by the Company on behalf of the railway, and the working stores belonging to the railway, at a valuation.

Terms of working.—The working expenses of the system, excluding expenditure on New Minor Works, are divided between these railways and the others comprising the system in proportion to their gross earnings. The Company retains the share attributable to these lines (which includes any single item of capital expenditure not exceeding Rs. 1,000, or if exceeding Rs. 1,000 but not exceeding Rs. 2,000, classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year), and pays the residue to the Mysore Durbar.

Rates and fares.—To be fixed from time to time by the Company with the approval of Government.

Statistics of working—

Calendar year.	TABLE I.				TABLE II.	
	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1896	2,90,226	...	...	...	...	...
1897	6,27,263	...	...	...	...	...
1898	15,70,079	...	...	...	...	...
1899	20,85,475	6,186	1,851	0.09	37	69.59
1900	22,94,457	66,227	21,219	1.06	34	63.43
1901	24,01,838	62,058	16,993	0.71	31	72.62
1902	24,05,667	64,606	23,367	0.97	33	63.83
1903	24,07,802	61,520	24,206	1.01	31	80.65
1904	24,04,391	68,224	24,624	1.02	35	63.90
1905	23,93,543	80,672	31,102	1.30	41	61.45
1906	23,94,973	1,11,176	44,989	1.88	56	59.33

22(d) Guntakul-Mysore frontier railway (3' 3½" gauge)—

Details of construction—

The line is 119.50 miles long. Its construction was sanctioned in 1889 and it was opened in 1893.

Permanent-way.—The permanent-way consists of 41½-lb. flat-footed steel rails on steel trough sleepers.

Ballast.—The line is ballasted throughout with stone.

Fencing.—The line is partially fenced.

Curves.—The sharpest curve has a radius of 600 feet.

Gradients.—The ruling gradient is 1 in 100.

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number Main head 22 **SOUTHERN MAHRATTA RAILWAY SYSTEM—contd.**
Sub-heads (a) to (m)

22(d) Guntakul-Mysore frontier railway (3' 3½" gauge)—concl'd.**Terms of contract—**

The Guntakul-Mysore frontier railway is worked under the following contract:—

Contract of—21st August 1898 (between the Secretary of State and the Southern Mahratta Railway Company) for construction and working.

The general conditions of the contract are as follows:—

Government aid.—The line is the property of Government.

Currency of contract.—The same as in the case of the Southern Mahratta railway.

Power of Company to surrender contract.—The same as in the case of the Southern Mahratta railway.

Terms of working.—The working expenses of the entire system of railways worked by the Company (including this railway), exclusive of Government supervision charges of the Southern Mahratta railway and the Mysore section, are divided between this railway and the other railways worked in proportion to their gross receipts. This railway's share of the working expenses is retained from its gross receipts. The residue is paid to Government.

Rates and fares.—To be fixed from time to time by the Company with the approval of Government.

Statistics of working—

Calendar year.	TABLE I.						TABLE II.	
	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1893	58,39,806	1,97,374	78,955	1.35	4,67,933	—3,88,978	38	60.00
1894	58,58,414	3,68,951	1,27,574	2.18	2,34,529	—1,06,655	49	65.34
1895	58,71,739	4,39,329	1,81,657	3.09	2,34,639	—52,982	71	58.65
1896	59,30,156	4,80,992	2,10,690	3.57	2,35,666	—24,926	77	56.20
1897	59,02,498	6,38,278	2,75,983	4.68	2,36,000	+ 39,983	103	56.76
1898	58,98,866	4,25,702	1,32,471	2.25	2,36,026	—1,03,555	69	69.88
1899	58,98,608	3,81,829	1,28,459	2.18	2,35,996	—1,07,537	62	66.62
1900	59,00,016	4,36,116	1,57,837	2.68	2,35,960	—78,123	70	63.81
1901	59,02,583	4,47,313	1,36,659	2.32	2,36,115	—39,456	73	69.45
1902	59,04,714	4,73,972	1,74,920	2.95	2,36,107	—61,787	76	63.22
1903	59,07,192	4,96,481	1,97,075	3.34	2,36,227	—39,152	80	60.31
1904	59,14,170	7,54,378	2,73,879	4.63	2,36,372	+ 37,507	131	63.69
1905	59,21,993	8,07,874	3,34,829	5.65	2,36,752	+ 94,077	130	53.55
1906	59,24,987	8,81,386	3,61,350	6.10	2,36,895	+ 1,34,455	142	59.00

22(e) Hindupur (Yesvantpur-Mysore frontier) railway (3' 3½" gauge)—**Details of construction—**

The line is 51.35 miles long. Its construction was sanctioned in 1890 and it was opened in 1893.

Permanent-way.—The rails on the ghat section are 50-lb. flat-footed steel, State railway type, and 41½-lb. flat-footed steel on the remainder of the line. The sleepers are Mysore teak throughout.

Ballast.—The line is ballasted throughout with stone.

Fencing.—The line is fenced throughout.

Curves.—The sharpest curve has a radius of 660 feet.

Gradients.—The ruling gradient is 1 in 100 with a 1 in 89 gradient on the ghat section.

Terms of contract.—See under Birur-Shimoga railway, 22 (c).

Statistics of working—

Calendar year.	TABLE I.				TABLE II.	
	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1892	24,41,741	...	...	...	...	...
1893	24,46,180	57,635	22,708	0.93	39	60.60
1894	21,31,989	1,61,704	58,504	2.32	61	65.06
1895	24,19,698	1,92,159	79,886	3.30	72	53.43
1896	23,94,762	2,23,900	99,592	4.16	84	55.50
1897	24,79,210	2,69,527	1,18,358	4.77	101	56.09
1898	24,98,316	1,80,081	56,430	2.26	67	68.66
1899	24,98,162	1,49,363	50,538	2.02	56	66.17
1900	24,98,047	1,88,183	67,135	2.69	70	64.32
1901	24,94,729	1,97,798	60,734	2.43	74	69.30
1902	24,97,811	2,13,486	77,908	3.12	80	63.51
1903	24,97,206	2,42,695	96,150	3.85	91	60.38
1904	24,84,842	3,67,023	1,33,715	5.37	138	63.66
1905	24,88,944	3,73,993	1,54,872	6.22	140	59.29
1906	25,00,014	4,03,306	1,63,783	6.55	151	59.49

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 22} Sub-heads (a) to (m). **SOUTHERN MAHRATTA RAILWAY SYSTEM—contd.**

22(f) Hospet-Kottur railway (3' 3½" gauge)—

The same remarks apply to this railway as are made against the Bellary-Rayadrug railway, 22 (b).

Details of construction—

The line is 18·03 miles long. Its construction was sanctioned in 1902 and it was opened in 1905.

Permanent-way.—The permanent-way consists of 41½-lb. flat-footed steel rails on pine, jamba and teak sleepers.

Ballast.—The line is being ballasted with gravel, stone and sand.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 575 feet radius.

Gradients.—The ruling gradient is 1 in 60.

Terms of contract—

The same as apply to the Bellary-Rayadrug railway, 22 (b).

Statistics of working—

Calendar year.	TABLE I.						TABLE II.	
	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Interest.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.
1905	Rs. 13,81,630	Rs. 29,230	Rs. -6,975	...	Rs. 48,242	Rs. -55,217	Rs. 17	125·86
1906	11,65,516	51,592	2,508	0·17	52,412	-19,914	23	25·17

22(g) Kolhapur railway (3' 3½" gauge)—**Details of construction—**

The line is 29·27 miles long. Its construction was sanctioned in 1888 and it was opened in 1891.

Permanent-way.—The permanent-way consists of 41½-lb. flat-footed steel rails on steel trough sleepers.

Ballast.—The line is ballasted throughout with gravel and sand.

Fencing.—The line is unfenced except for a very short length.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 100.

Terms of contract—

The Kolhapur railway is worked under the following contract:—

Contract of—17th July 1891 (between the Kolhapur Durbar and the Southern Mahratta Railway Company) for maintenance and working.

The general conditions of the contract are as follows:—

Government aid.—The line is the property of the Kolhapur State.

Currency of contract.—The contract may be terminated, by either party on six months' notice.

Terms of working.—The working expenses of the system, excluding Government supervision charges and New Minor Works, are divided between this railway and the others comprising the system in proportion to their gross earnings. The Company retains the share attributable to these lines (which includes any single item of capital expenditure not exceeding Rs. 1,000, or if exceeding Rs. 1,000 but not exceeding Rs. 2,000, classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year), and pays the residue to the Kolhapur Durbar.

Rates and fares.—The same as in force on the Southern Mahratta railway.

Statistics of working—

Calendar year.	TABLE I.				TABLE II.	
	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1889	13,59,602	...	...	...	...	...
1890	21,37,699	...	...	...	...	...
1891	23,16,183	58,881	20,866	0·90	60	64·26
1892	23,81,946	90,793	29,182	1·23	55	67·72
1893	23,21,687	1,88,196	40,091	2·15	78	57·67
1894	23,65,817	1,23,390	43,332	1·89	82	64·61
1895	23,00,206	1,21,147	51,006	2·15	80	57·90
1896	23,05,912	1,21,655	54,305	2·35	80	55·36
1897	23,21,837	94,630	41,981	1·80	63	55·34
1898	23,24,807	78,271	24,201	1·04	52	69·08
1899	23,24,807	99,195	34,986	1·46	66	65·74
1900	23,24,807	1,24,215	44,875	1·93	82	63·87
1901	23,24,807	1,14,114	35,750	1·54	75	68·67
1902	23,25,587	1,23,913	46,407	2·00	81	62·55
1903	23,26,188	1,21,957	48,053	2·07	80	60·60
1904	23,26,251	1,41,676	53,228	2·29	93	62·43
1905	23,26,251	1,70,404	69,492	2·98	112	59·25
1906	23,26,251	1,76,394	71,811	3·09	116	59·25

APPENDIX 38—contd.

History of railways constructed and in progress.

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Number ^{Main head 22}_{Sub-heads (a) to (m)} **SOUTHERN MAHRATTA RAILWAY SYSTEM—contd.****22(h) Mysore-Nanjangud railway (3' 3½" gauge)—****Details of construction—**

The line is 15·90 miles long. It was opened in 1891.

Permanent-way.—The permanent-way consists of 41½-lb. flat-footed steel rails, mostly on Mysore teak with a mixture of jamba sleepers.

Ballast.—The line is ballasted throughout with stone and sand.

Fencing.—The line is partially fenced.

Curves.—The sharpest curve has a radius of 700 feet.

Gradients.—The ruling gradient is 1 in 100.

Terms of contract—

The Mysore-Nanjangud railway is worked under the following contract:—

Contract of—14th December 1899 (between His Highness the Maharaja of Mysore and the Southern Mahratta Railway Company) for working.

The general conditions of the contract are as follows:—

Government aid.—The line is the property of the Mysore State.

Currency of contract.—The contract is terminable on the 1st January or 1st July in any year, on six months' notice by either party. If not terminated sooner, this agreement terminates on the date on which the Mysore contract of the 31st August 1887 terminates. On determination the Company makes over to the Mysore Government the railway and works and pays to that Government all moneys on account of the railway, the Government indemnifying the Company against all debts and liabilities incurred on account of the railway then subsisting. If mutually agreed upon, the working stores, to be taken over by the Mysore Government at a valuation.

Terms of working.—After deduction of expenditure on New Minor Works, which is debited to each railway direct from the total working expenses of the Company's railway system, the balance is divided between this railway and the other railways comprised in the Company's system in the proportion which the gross receipts of this railway bear to the gross receipts of such other railways, and the sum so ascertained, together with any single item of capital expenditure not exceeding Rs. 1,000, or if exceeding Rs. 1,000, but not exceeding Rs. 2,000, classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year, representing the working expenses of this railway, is retained by the Company, and the residue paid to the Mysore Government.

Rates and fares.—To be fixed by the Company with the approval of Government.

Statistics of working—

Calendar year.	TABLE I.				TABLE II.	
	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1892	5,92,414	16,478	6,163	1·63	21	62·60
1893	6,18,551	33,812	14,001	2·26	43	58·59
1894	6,00,095	37,448	12,806	2·13	47	65·65
1895	6,00,212	39,100	16,132	2·69	49	57·98
1896	6,09,681	59,322	17,125	2·81	50	56·45
1897	6,31,764	83,197	14,265	2·25	42	57·41
1898	6,43,821	31,493	10,124	1·57	40	67·85
1899	6,46,051	16,810	5,671	0·88	21	66·26
1900	6,53,741	30,850	11,357	1·74	38	63·20
1901	6,56,162	25,302	7,863	1·20	35	72·22
1902	6,56,162	29,870	10,938	1·67	36	63·78
1903	6,56,402	31,923	12,687	1·93	39	60·36
1904	6,56,462	34,873	14,404	2·19	47	61·95
1905	6,56,462	44,174	18,015	2·74	54	59·22
1906	6,56,462	49,946	20,559	3·13	61	58·84

22(i) Mysore Section (Southern Mahratta) (3' 3½" gauge)—**Details of construction—**

The line, which connects Mysore with Harihar, is 296·22 miles long. First sanction to its construction was given in 1877 and it was opened through in 1889.

Permanent-way.—The permanent-way consists of 41½-lb. flat-footed steel rails, with the exception of about 25 miles which are laid with iron rails. The rails are laid on Mysore teak sleepers with a small proportion of jamba and steel trough sleepers.

Ballast.—The line is ballasted throughout with stone and sand.

Fencing.—The line is only partially fenced.

Curves.—The sharpest curve has a radius of 660 feet.

Gradients.—The ruling gradient is 1 in 100 between Harihar and Bangalore, and 1 in 70 between Bangalore and Mysore.

Terms of contract—

The Mysore section is worked under the following contract:—

Contract of—31st August 1887 (between the Secretary of State and the Southern Mahratta Railway Company) for construction, maintenance and working.

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 22} Sub-heads (a) to (m) **SOUTHERN MAHRATTA RAILWAY SYSTEM—contd.****22(i) Mysore Section (Southern Mahratta) (3' 3½" gauge)—concl'd.****Terms of contract—concl'd.**

The general conditions of the contract are as follows:—

Government aid.—Guarantee of interest in sterling at 4 per cent. on £1,200,000 debenture stock.

Terms of contract.—To meet the cost of constructing the Gubbi-Harihar extension, the Company raised £1,224,000, by the issue of debenture stock for the nominal amount of £1,200,000. The stock is redeemable on or after the 1st March 1936. The contract provides that the Company may raise £1,224,000, and that any further moneys required be supplied by the Secretary of State. All moneys whatsoever received by or on behalf of the Company in respect of the undertaking are the absolute property of the Secretary of State during the continuance of this contract.

Currency of contract.—Government may determine the contract at any time, on six months' notice, should the Company fail to observe its obligations, or the line be worked at a loss. It is also provided that should the Company's contract for the Southern Mahratta railway system be determined, then this contract will also be determined. On the termination of the contract, the Secretary of State, if so required by the Company, takes over all liabilities in respect of the debenture stock issued by the latter (which is not redeemable until the 1st March 1936).

Power of Company to surrender contract.—Nil.

Terms of working.—After deducting working expenses, (which may include any single item of capital expenditure not exceeding Rs. 1,000, or if exceeding Rs. 1,000 but not exceeding Rs. 2,000, classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year), the net receipts are divided in the proportion of three-fourths to Government and one-fourth to the Company.

Rates and fares.—To be fixed from time to time by the Company with the approval of Government.

Statistics of working—

Calendar year.	TABLE I.						TABLE II.		
	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Company's share of net earnings. (Based on actual receipts and payments during the year.)	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1879	7,98,213	...	...	...	23,960	...	—23,960	...	...
1880	21,37,736	...	...	...	68,908	...	—68,908	...	...
1881	36,56,345	1,31,525	53,753	1·47	98,912	...	—45,159	51	59·13
1882	45,95,958	2,88,390	1,63,495	2·25	1,68,949	...	—65,494	68	64·11
1883	57,69,957	3,02,895	99,675	1·73	2,19,851	...	—1,19,676	67	67·09
1884	62,61,620	3,61,448	1,65,479	2·64	2,41,052	...	—75,573	67	54·22
1885	64,59,346	4,33,954	2,07,784	3·20	2,51,730	...	—43,946	60	52·12
1886	71,35,111	4,69,274	1,05,385	1·18	5,57,104	...	—4,51,719	65	59·04
1887	91,36,478	7,13,784	1,41,198	1·55	6,70,864	...	—5,29,666	71	71·60
1888	1,25,76,697	5,70,657	12,295	0·42	6,91,210	...	—6,41,915	79	76·28
1889	1,44,24,093	8,96,273	2,22,034	1·54	7,07,500	47,964	—5,33,330	72	75·23
1890	1,47,11,610	11,56,918	2,61,700	0·02	6,48,733	52,831	—4,39,864	77	77·94
1891	1,50,76,285	13,21,525	4,43,717	2·94	6,54,950	96,004	—3,07,187	86	66·50
1892	1,46,36,205	13,90,463	4,47,906	3·06	7,29,624	1,01,305	—3,83,023	89	67·92
1893	1,46,42,217	16,83,203	6,74,705	4·61	7,70,439	1,64,670	—2,60,464	109	69·92
1894	1,47,60,293	14,45,412	4,76,156	3·23	8,38,525	1,13,566	—5,05,985	94	68·99
1895	1,49,22,452	15,78,231	6,30,769	4·23	8,70,947	1,23,096	—3,63,274	103	59·72
1896	1,51,08,257	15,84,981	6,76,873	4·48	8,21,588	1,71,768	—3,16,483	103	57·29
1897	1,51,99,757	18,80,019	7,95,147	5·23	7,75,768	1,80,992	—1,61,553	122	57·54
1898	1,55,07,319	18,92,851	4,13,121	2·67	7,38,461	1,66,986	—4,92,026	90	70·32
1899	1,56,75,416	10,60,469	3,29,033	2·10	7,21,117	76,861	—4,68,945	69	68·97
1900	1,58,70,510	13,76,391	4,71,401	2·97	7,18,200	1,11,070	—3,58,069	89	65·77
1901	1,60,14,879	14,31,240	4,07,791	2·55	7,22,224	1,07,697	—4,22,150	93	71·55
1902	1,60,76,009	15,97,046	5,58,082	3·47	7,21,062	1,16,979	—2,79,959	104	65·00
1903	1,62,34,903	15,35,270	5,82,298	3·59	7,20,000	1,46,896	—2,84,598	100	62·07
1904	1,62,59,794	15,85,324	5,63,667	3·47	7,20,000	1,52,391	—3,08,724	103	64·44
1905	1,64,78,981	17,90,901	6,98,051	4·24	7,20,000	1,37,682	—1,59,631	116	61·02
1906	1,65,59,502	18,48,348	7,19,072	4·34	7,20,000	1,97,286	—1,98,214	120	61·10

22(j) West of India Portuguese railway (3' 3½" gauge)—

Chairman.—Sir Henry Green, K.C.S.I., C.B.

Secretary.—H. Ringler-Thomson, Esq.

Office.—4 Coleman Street, London, E.C.

The line was constructed with the object of connecting the British and Portuguese territories and of affording the Southern Mahratta country a harbour on the West Coast. The Southern Mahratta railway took over the working of the line as from the 1st July 1902.

Details of construction—

The line runs from the Portuguese frontier to Mormugao, and is 51·10 miles long. Its construction was sanctioned in 1891 and it was opened through in 1898.

Permanent-way.—The permanent-way throughout consists of 62-lb. flat-footed steel rails on creosoted pine, sal, teak and jamba sleepers.

Ballast.—The line is ballasted throughout with laterite and blue stone.

Fencing.—The line is partially fenced.

Curves.—The sharpest curve is of 720 feet radius.

Gradients.—The ruling gradient is 1 in 100 with a 1 in 40 on the Ghat section.

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 22}
^{Sub-heads (a) to (m).} SOUTHERN MAHRATTA RAILWAY SYSTEM—contd.

22 (j) West of India Portuguese railway (3' 3½" gauge)—concl'd.

Terms of contracts—

The West of India Portuguese railway is worked under the following contracts:—

Contracts of—18th April 1881, modified by the contract of 19th December 1892 (between the Portuguese Government and the West of India Portuguese Railway Company) for the construction of a harbour at the Port of Mormugao and a railway from Mormugao to the Portuguese Frontier.

21st August 1902, between the Southern Mahratta Railway Company and the West of India Portuguese Railway Company for the maintenance and working of the railway from Mormugao to the Portuguese Frontier, and the harbour at the Port of Mormugao.

The general conditions of the contracts are as follows:—

Government (Portuguese) aid.—5 per cent. per annum is guaranteed to the West of India Portuguese Railway Company on £800,000 and 6 per cent. on £550,000.

Currency of contracts.—The contract of 1881 is current for a period of 99 years from date of opening, when the line and all its appurtenances become the property of the Portuguese Government by payment to the Company of the value of rolling-stock, moveable machinery, stores, etc. The Portuguese Government may, however, determine the contract, at any time, on six months' previous notice, by payment in sterling of the actual outlay of the Company on the railway, telegraph and other works, with 10 per cent. added thereto, together with the then value of rolling-stock, machinery, station appliances and stores. The contract of 1902, between the Southern Mahratta and the West of India Portuguese Railway Companies, which took effect from the 1st July 1902, is to continue in force for five years, subject to amendment or determination after two years on six months' notice by either party.

Power of Company to surrender contract.—By the contract of 1881 as modified by that of 1892 the West of India Portuguese Railway Company may at any time surrender the contract by giving six months' notice if the Portuguese Government fail to pay in full the interest guaranteed on its capital. On surrender of the contract the Portuguese Government are to pay to the Company in sterling an amount equal to the total capital expended on the railway, telegraph, etc., and in addition 10 per cent. of such expenditure; and also purchase the rolling-stock, machinery, etc., at a valuation.

Terms of working by Southern Mahratta Railway Company.—The West of India Portuguese and the Southern Mahratta railways are worked as one concern, and the expenses of the system (exclusive of expenditure on 'New Minor Works' and of interest payable by the Southern Mahratta railway on the capital cost of telegraph lines) are divided in proportion to their gross earnings, the net earnings to be applied—in payment of a contribution sanctioned by the Portuguese Government—towards a reserve fund; in payment of the guaranteed dividends on the capital of the Company; and in payment of the residue to the Portuguese Government and the Company in equal proportions.

The contract of 1902 provides that a separate account be kept of the revenue transactions at the Port of Mormugao, and the amount to be charged for working to be the actual expenses of working and maintenance, *plus* 10 per cent. thereon for supervision by the Southern Mahratta railway, subject to the provision that the relation of the aggregate expenses of working—including supervision—to the total receipts shall not exceed, without the sanction of the West of India Portuguese Railway Company, the mean of the figures which represent the relation of such expenditure to receipts during the years 1895, 1896 and 1899; should any such excess occur it is to be annulled or reduced as much as possible by a corresponding diminution in the charge for supervision.

Rates and fares.—Subject to the maxima prescribed in the contract between the Portuguese Government and the West of India Portuguese railway and to the maxima and minima prescribed in the contracts between the Secretary of State and the Southern Mahratta railway, the rates both for through and local working shall be fixed from time to time by the Southern Mahratta railway and shall be applicable to the whole system.

The shipping and port charges to conform with those in force under the Bombay Port Trust, and not to exceed those charges without the mutual consent of the British and Portuguese Governments.

Statistics of working—

Calendar year.	TABLE I.				TABLE II.	
	Capital outlay (including outlay on Harbour works) to and of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1890	1,68,14,170	4,75,437	67,001	0·41	138	74·24
1891	1,63,32,139	5,44,014	1,21,593	0·74	157	86·01
1892	1,63,00,901	3,74,681	11,107	0·07	109	106·01
1893	1,62,74,816	5,86,705	1,65,069	1·01	168	78·18
1894	1,63,12,813	5,48,673	1,19,332	0·73	157	86·47
1895	1,68,31,966	5,83,077	1,12,136	0·69	166	90·75
1896	1,63,80,444	2,97,176	—78,893	...	90	137·34
1897	1,63,40,168	1,79,722	—1,00,785	...	55	189·46
1898	1,62,97,448	2,20,870	—1,10,145	...	65	173·60
1899	1,62,96,432	5,72,475	1,64,665	1·01	157	83·15
1900	1,63,29,262	5,33,596	—66,845	...	96	120·04
1901	1,63,42,023	3,68,120	—46,580	...	205	113·20
1902	1,63,08,793	3,54,657	51,887	0·37	193	85·51
1903	1,63,08,793	3,90,235	1,51,112	1·10	149	61·86
1904	1,68,08,793	4,69,786	1,83,414	1·33	184	62·55
1905	1,68,90,369	4,44,519	1,77,953	1·29	167	59·97
1906	1,63,90,259	4,38,965	1,73,266	1·26	165	60·58

APPENDIX 38—contd.

History of railways constructed and in progress.

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Number ^{Main head 22}_{Sub-heads (a) to (m)} SOUTHERN MAHRATTA RAILWAY SYSTEM—conold.

22 (k) Bezwada-Masulipatam (3' 3½" gauge)—

This railway will be 49.47 miles long. It was sanctioned in 1905 and is under construction.

22 (l) Kurnool Road-Kurnool (3' 3½" gauge)—

The construction of this line has been sanctioned with the object of providing facilities for the distribution of grain to the population of the Madras Presidency, and of lessening difficulties incidental to the period of scarcity.

The line will be 32 miles long. It was sanctioned in 1906 and is under construction.

22 (m) Sangli (3' 3½" gauge)—

This railway (Miraj Junction to Sangli town) will be 5.77 miles long. Its construction from funds supplied by the Sangli Durbar was sanctioned in 1905.

Number ^{Main head 23}_{Sub-head (a)} UDAIPUR-CHITOR RAILWAY (3' 3½" gauge) -

Running powers—

Home line over Foreign line :—

Rajputana-Malwa railway, Berach Signal Station to Chitorgarh.

Miles.

1.42

The line is owned by the Udaipur State. It was worked by the Bombay, Baroda and Central India railway as a temporary measure up to the 31st December 1897, since which date it has been worked by the Udaipur State.

Details of construction—

The line is 67.30 miles long. Its construction was sanctioned in 1894 and it was opened through in 1899.

Permanent way.—The permanent way consists of 41½-lb. flat-footed steel rails laid on deodar sleepers.*Ballast.*—The ballast consists of broken stone.*Fencing.*—The line is fenced round stations only.*Curves.*—On the Berach-Debari section the sharpest curve is of 1,116 feet radius; and on the extension from Debari to the Ahr river near Udaipur, at the 11th mile, the sharpest curve has a radius of 820 feet.*Gradients.*—The ruling gradient is 1 in 120, except on the section Debari to Udaipur where it is 1 in 100.

Terms of contract—

The line is owned and worked by the Udaipur State.

Statistics of working—

Calendar year.	TABLE I.				TABLE II.	
	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1893	7,000	...	...	...	...	...
1894	2,70,472	...	...	...	...	...
1895	13,39,850	54,702	18,778	1.40	42	65.67
1896	15,63,721	1,35,219	58,750	3.44	48	60.25
1897	15,99,040	1,23,175	49,881	2.68	39	65.11
1898	17,89,252	1,47,822	61,364	3.43	46	57.33
1899	19,80,912	2,10,540	1,01,829	5.27	62	50.21
1900	19,60,010	3,17,928	1,85,703	9.38	91	41.56
1901	20,61,838	2,22,175	94,112	4.56	63	57.63
1902	20,65,670	2,17,368	97,131	4.70	62	55.32
1903	20,66,171	1,77,817	66,446	3.21	51	62.63
1904	20,66,003	1,51,293	53,175	2.57	43	64.86
1905	20,67,164	2,07,927	1,03,552	5.00	58	50.19
1906	20,71,667	2,47,813	1,35,467	6.52	71	45.33

Number ^{Main head 24}_{Sub-head (a)} BARASET-BASIRHAT LIGHT RAILWAY (2' 6" gauge)—

Details of construction—

The line is 26.06 miles long. Its construction was sanctioned in 1903 and it was opened in 1905.

Permanent way.—The permanent way consists of 30-lb. flat-footed steel rails on pyinkado, sal and Australian jarrah wood sleepers.*Ballast.*—The line is ballasted with broken brick.*Fencing.*—The line is unfenced.*Curves.*—The sharpest curve has a radius of 400 feet.*Gradients.*—The ruling gradient is 1 in 250.

Terms of contract—

The line is worked on the terms contained in the Bengal Government Notification No. 86 R., dated the 15th May 1903, under the following agreement:—

Agreement—of 14th December 1897 (between the District Board of the 24-Parganas and the Baraset-Basirhat Light Railway Company).

The general conditions are as follows:—

Aid by District Board.—The District Board guarantees such an annual subsidy as will make the net profits equivalent to Rs. 1,500 per annum per mile of line declared open, subject to a maximum of Rs. 38,000, and allows the free use of a width of not more than 8 feet along one side of the District road. (The Company to acquire at its own expense land necessary for stations and diversions.)*Currency of agreement.*—Upon the expiration of twenty-one years from the date of the order authorising the construction, by giving six months' notice, or at intervals of seven years thereafter, the District Board can exercise the right of purchase on payment of twenty times the average yearly net earnings of the four years preceding, together with a bonus of twenty per cent. thereon.

APPENDIX 88—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 24} Sub-head (a) **BARASET-BASIRHAT LIGHT RAILWAY (2' 6" gauge)—concl^d**Terms of contract—concl^d.

Terms of working.—Any surplus profits in excess of 4 per cent. on share capital *plus* not more than 4 per cent. on debenture capital are equally divided between the District Board and the Company.

Rates and fares.—Certain maxima have been fixed within which the Company may vary its rates.

Statistics of working—

Calendar year.	TABLE I.							TABLE II.	
	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Subsidy from District Board.	Total income.	Percentage of total income on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.			Rs.	Rs.	Rs.	
1905	9,06,310	1,11,202	55,675	6.07	—5,394	50,281	5.55	90	49.33
1906	9,47,058	1,50,731	79,488	8.39	—12,609	66,819	7.06	111	47.26

Number ^{Main head 25} Sub-head (a) **BARSI LIGHT RAILWAY (2' 6" gauge)—***Chairman.*—Sir Alexander Wilson.*Secretaries.*—W. A. Browne & Co.*Offices.*—Winchester House, Old Broad Street, E. C.

Details of construction—

The open mileage of the Barsi Light railway is 78.50 miles. It is made up of the following :—

- (1) Main line, Barsi Road Junction to Barsi Town, 21.59 miles ;
- (2) Tadwale extension, Barsi Town to Tadwale, 26.70 miles ; and
- (3) Pandharpur extension, Barsi Road Junction to Pandharpur, 30.21 miles.

The main line was sanctioned in 1895 and opened in 1897 and the Tadwale and Pandharpur extensions were sanctioned in 1902 and opened in 1906.

Permanent-way.—The permanent-way consists of 35-lb. flat-footed steel rails on steel sleepers.

Ballast.—The line is ballasted with stone and moorum.

Fencing.—The line is unfenced, except for a short distance on either side of level crossings and at bridges. Barsi Road Junction, Barsi Town, Tadwale and Pandharpur stations are also fenced.

Curves.—The sharpest curve is of 450 feet radius.

Gradients.—The ruling gradient is 1 in 100. There are, however, two steeper gradients on the main line—one of 1 in 89 and one of 1 in 90 ; and two on the Tadwale extension—one of 1 in 50 and the other of 1 in 70.

Terms of contracts—

The Barsi Light railway is worked under the following contracts :—

Contracts of—1st August 1895 (between the Secretary of State and the Barsi Light Railway Company) for construction, maintenance and working the line from Barsi Road Junction to Barsi town.

26th August 1902 (between the Secretary of State and the Barsi Light Railway Company) for construction and working of the extensions.

4th December 1905, supplemental to that of 26th August 1902.

Despatch—from Secretary of State, No. 51 Railway, dated the 8th July 1904, regarding the grant of extension of the term at the end of which the option of purchase may be exercised.

The general conditions are as follows :—

Government aid.—The Company is allowed the use of part of the road between Barsi Town and Barsi Road Junction stations. Land is provided free for the extensions.

Currency of contracts.—Government may determine the contracts on the 1st January 1914, or at the expiration of any subsequent period of 10 years, by giving 12 months' notice. If the contract is so determined Government are to pay the Company in England in sterling an amount equal to the total paid up capital, so far as such capital was expended with the authority of the Secretary of State.

Power of Company to surrender contracts.—Nil.

Terms of working.—The line is worked by the owning company.

Rates and fares.—Certain maxima have been fixed within which the Company is permitted to vary its rates.

Statistics of working—

Calendar year.	TABLE I.				TABLE II.	
	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1895	2,357	...	...	...	...	...
1896	10,06,657	...	...	...	...	...
1897	13,43,891	1,07,778	21,560	1.60	115	30.00
1898	13,42,592	1,30,331	24,559	1.83	116	31.15
1899	13,56,800	1,56,118	64,175	4.75	139	58.63
1900	13,50,501	1,24,440	42,440	3.13	111	65.90
1901	12,99,589	1,68,238	79,588	6.13	150	52.69
1902	13,18,242	1,50,275	52,879	4.02	134	61.81
1903	12,59,175	1,30,694	53,423	4.24	116	59.12
1904	13,18,288	1,66,934	64,952	4.93	149	61.09
1905	28,18,907	2,19,478	1,39,618	4.96	195	36.39
1906	39,41,807	2,19,434	1,09,362	2.78	96	49.00

APPENDIX 38—contd.

History of railways constructed and in progress.

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Number ^{Main head 26}_{Sub-head (a)} **BUKHTIARPORE-BEHAR LIGHT RAILWAY (2' 6" gauge)—**

The line, which has been laid as far as possible on the District road, is 18.50 miles long. Its construction was sanctioned in 1901 and it was opened in 1903.

Details of construction—

Permanent-way.—The permanent-way consists of 30-lb. flat-footed steel rails laid on pyinkado sleepers.

Ballast.—The ballast consists of broken stone, except in the first few miles where a portion of the packing has been done with broken brick.

Fencing.—The line is unfenced.

Curves.—The sharpest curve has a radius of 260 feet.

Gradients.—The grades are easy, except at bridge approaches and up through the village of Chero where the grade is 1 in 100.

Terms of contract—

The railway has been constructed and is worked on the terms contained in Bengal Government Notification No. 100 R., dated the 25th June 1901, under the following agreement:—

*Agreement of—*21st August 1899 (between the District Board of Patna and the Bukhtiarpore-Behar Light Railway Company).

The general conditions are as follows:—

Government aid.—In addition to land, which has been provided free of charge except for station sites and diversions from the district road, the District Board supplements the net earnings, subject to a maximum limit of Rs. 32,000 per annum, to allow of the Company paying a dividend of 4 per cent. per annum on the Company's share capital of Rs. 8,00,000.

Currency of agreement.—In the event of the District Board exercising the right of purchase under section 41 of the Bengal Act, III of 1883, viz., upon the expiration of twenty-one years from the date of the order of the Local Government, authorising the construction of the line, by giving six months' notice, or at intervals of 7 years thereafter, the value to be calculated at 20 years' purchase of the average net profits to the Company during the four years preceding the transaction together with a bonus of 20 per cent. thereon.

Terms of working.—Any surplus profits in excess of 4 per cent. on share capital, plus not more than 4 per cent. on debenture capital, are equally divided between the District Board and the Company.

Rates and fares.—Certain maxima have been fixed within which the Company is permitted to vary rates.

Statistics of working—

TABLE I.					TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1903	7,47,838	35,800	15,120	2.16	74	57.77
1904	8,10,059	1,13,590	65,963	8.11	181	41.90
1905	8,11,338	88,661	35,440	4.37	92	60.03
1906	8,30,262	1,11,324	48,060	5.79	116	56.81

Number ^{Main head 27}_{Sub-head (a)} **CUTCH STATE RAILWAY (2' 6" gauge)—****Details of construction—**

The mileage of the open line (Tuna to Anjar) is 11.67 miles. Its construction was sanctioned in 1903 and it was opened in 1905.

There are, in addition, 27.38 miles (Anjar to Bhuj) under construction.

Permanent-way.—The permanent-way consists of 30-lb. flat-footed steel rails on half-round jungle teak sleepers.

Ballast.—The line is ballasted with stone.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 359 feet radius.

Gradients.—The ruling gradient is 1 in 200.

Terms of contract—

Nil. The line is owned and worked by the Cutch State.

Statistics of working—

TABLE I.					TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1905	4,25,731	22,367	15,864	3.73	59	29.07
1906	7,18,667	40,273	19,919	2.77	68	50.54

APPENDIX 38—contd.

History of railways constructed and in progress.

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Number ^{Main head 28}_{Sub-head (a)} **DHOLPUR-BARI RAILWAY (2' 6" gauge)—****Details of construction—**

This line, from Dholpur on the Indian Midland railway to Bari, was sanctioned in 1905 and is under construction by, and at the cost of, the Dholpur State. It will be 19·25 miles long.

Terms of contract—

Nil. When open, the line will be maintained and worked by the Durbar.

Number ^{Main head 29}_{Sub-head (a)} **DWARA-THERRIA LIGHT RAILWAY (2' 6" gauge)—****Details of construction—**

The line will be 19·50 miles long. Its construction was sanctioned in 1902.

The construction of this line, which was suspended in June 1904 for want of funds, continues at a standstill, the company being unable to raise the funds necessary for its completion.

Terms of contract—

The Dwara-Therria Light railway on completion is to be worked under—

Terms.—Contained in the Notification issued by the Chief Commissioner of Assam under letter No. 44, dated the 14th August 1902.

The general conditions are as follows:—

Government aid.—Guarantee of interest at 4 per cent. per annum for 10 years on a debenture loan of 4 lakhs of rupees, required to complete the Dwara-Maolong section. Land to be provided free of cost.

Currency of contract.—The Secretary of State may, after the Dwara-Maolong section has been opened for twenty-one years and thereafter at intervals of ten years, terminate the contract and take over the railway with all its equipments, buildings and property, upon giving two years' previous notice, on paying twenty-five times the average yearly net earnings of the last three years with a minimum of 100 per cent. of the cost price of the light railway.

Rates and fares.—Certain maxima have been fixed. Full control over charges of all kinds for the use of the railway is reserved by the Local Government.

Number ^{Main head 30}_{Sub-head (a)} **KALKA-SIMLA RAILWAY (2' 6" gauge)—**

Chairman.—Colonel Alexander Jerome Filgate, R.E.

Secretary.—C. E. Rutter, Esq.

Offices.—17, Victoria Street, Westminster, S. W.

The railway was constructed by the Delhi-Umballa-Kalka Railway Company.

On the representations of the Delhi-Umballa-Kalka Railway Company it was decided to purchase the line for £300,000, the Secretary of State waiving all claims of arrears of unpaid interest on the advances made to the company. The purchase of the line by the State was effected from 1st January 1906; but the company continued to work it under the direct orders of the Railway Board up to the 31st December 1906. It was made over to the North Western (State) railway administration with effect from the 1st January 1907.

Details of construction—

The line is 59·44 miles long. Its construction was sanctioned in 1893 and it was opened in 1903.

Permanent-way.—The permanent-way consists of 41½-lb. flat-footed steel rails on wooden sleepers.

Ballast.—The line is ballasted with stone.

Fencing.—The line is fenced only along the Kalka camping ground and through the skirts of the town of Kalka.

Curves.—Most of the curves are compound, the limiting radius being 120 feet.

Gradients.—The ruling gradient is 1 in 33.

Terms of contract—*Nil.* The line is owned by the State.

Rates and fares.—Certain maxima and minima have been fixed, and, subject to certain special conditions regarding charges for tunnels, rates may be varied within the maxima and minima.

Statistics of working—

TABLE I.					TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
1899	Rs. 5,53,228	Rs. ...	Rs. ...	...	Rs. ...	...
1900	18,18,465	...	...	...	...	...
1901	34,86,993	...	...	...	...	...
1902	92,81,656	...	...	...	...	...
1903	1,41,32,881	33,052	7,022	...	...	...
1904	1,68,25,512	5,90,403	2,08,240	0·04	7	78·09
1905	1,78,11,644	7,52,460	4,00,813	1·24	191	64·75
1906	1,69,06,436	7,61,322	3,07,125	2·28	243	46·73
				1·88	247	59·62

APPENDIX 38—contd.

History of Railways constructed and in progress.

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Number ^{Main head 31} ^{Sub-head (a)} **SHAHDARA (DELHI)-SAHARANPUR LIGHT RAILWAY (2'6" gauge)—**

Details of construction—

The line will be 125 miles long, *viz.*, (1) main line (Shahdara to Saharanpur) 95 miles and (2) branch (Baraut to Meerut) 30 miles.

Its construction and working by Messrs. Martin and Company of Calcutta was authorized by an order contained in the Notification of the Government of the United Provinces of Agra and Oudh, ³³⁹/₁₈₇ R., dated the 18th April 1904, and a company, styled the Shahdara (Delhi)-Saharanpur Light Railway Company, was registered on the 28th November 1905 for the purpose of constructing the line.

Only the main line is under construction.

Terms of contract—

The line will be worked under the following agreement:—

Agreement of—11th October 1905 (between the Government of the United Provinces of Agra and Oudh and Messrs. Martin and Company).

The general conditions are as follows:—

Government aid.—Free grant of land for a single 5' 6" gauge line and for all conveniences and works.

Currency of agreement.—The Secretary of State will have the right to terminate the contract 21 years after the date of opening or 23 years after the date of the Government letter sanctioning the construction of the tramway, whichever is earlier, at 25 years' purchase of the annual profits to the Company for the preceding 3 years, subject to a minimum of the capital expended and a maximum of 25 per cent. in excess of that sum. This option, if not exercised at the time mentioned, may be exercised at the end of successive periods of 7 years counting from that date. In the event of its being determined to construct a railway on a different gauge in place of the tramway and if the Government and the Company fail to agree that the alteration shall be made by the Company, then the Government will have the right to acquire the tramway at any time on 12 months' notice at 25 per cent. in excess of the Company's capital expenditure.

Terms of working.—Whenever the net profits of the tramway shall be in excess of 4 per cent. upon the paid up capital of the company, such surplus profits shall, after setting aside such reasonable sum as the directors of the company may deem proper to carry forward, be equally divided between the Government and the company.

Rates and fares.—Certain maxima have been fixed.

Number ^{Main head 32} ^{Sub-head (a)} **TARAKESHWAR-MAGRA LIGHT RAILWAY (2' 6" gauge)—**

Details of construction—

The line is 33.27 miles long, *viz.*:—from Magra to Tarakeshwar (31.12 miles) and from Magra to Tribeni (2.15 miles). Its construction was sanctioned in 1891 and the two sections were opened in 1895 and 1904, respectively.

Permanent way.—The permanent way of the main line consists of 30-lb. flat-footed steel rails laid for 10 miles on steel transverse sleepers and for the remainder on pyinkado sleepers. The Tribeni extension is laid on sal sleepers.

Ballast.—Sand and broken brick.

Fencing.—The line is partially fenced.

Curves.—The sharpest curve is of 716.25 feet radius.

Gradients.—The ruling gradient on the main line is 1 in 1,000; there are short gradients of 1 in 500 to 1 in 700 at bridge approaches; from the bridge under the East Indian railway to Magraganj station, the line is on a gradient of 1 in 350. The ruling gradient on the Tribeni extension is 1 in 500.

Terms of contracts—

The Tarakeshwar-Magra Light railway is maintained and worked on the terms contained in Bengal Government Notification No. 1, dated the 4th January 1896, under the following agreements:—

Agreement of—16th October 1896 (between the District Board of Hooghly and the Bengal Provincial Railway Company).

12th March 1904 (between the Secretary of State for India and the Company).

The general conditions are as follows:—

Government aid.—Free grant of land for the Tribeni extension.

Currency of agreement.—In the event of the District Board wishing to purchase the railway at the end of 21 years under the provisions of section 41 of the Bengal Tramways Act, 1883 (Bengal Code), the promoters bind themselves to make it over at a price two-fifths in excess of the original capital outlay.

Terms of working.—The line is worked by the owning company.

Rates and fares.—Certain maxima have been fixed within which the Company is permitted to vary its rates.

Statistics of working—

TABLE I.					TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1898	9,44,627	74,074	21,002	2.22	46	71.65
1899	9,62,446	66,168	12,192	1.27	41	81.58
1900	9,61,811	76,594	20,961	2.18	47	72.63
1901	9,72,175	83,150	19,890	2.04	51	70.23
1902	9,76,194	84,272	24,842	2.54	52	70.82
1903	10,15,987	85,540	23,350	2.30	53	70.87
1904	10,44,975	89,735	27,564	2.63	52	69.28
1905	10,40,874	86,688	21,679	2.07	50	74.81
1906	10,73,087	1,00,073	33,762	3.05	58	67.26

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 33} ^{Sub-head (a)} **TEZPORE-BALIPARA LIGHT RAILWAY (2' 6" gauge)—**

On the 3rd May 1898, the Indian Railways Act, IX of 1890, except section 135, was applied to the line.

A tramway constructed at the expense of the Borjuli Tea Company connects the Borjuli Tea Factory with Rangapara station on the Tezapore-Balipara Light railway. The tramway is 2 miles long and is worked by the Tezapore-Balipara Light railway. It is used for passenger and goods traffic.

Details of construction—

The line is 20·10 miles long. Its construction was sanctioned in 1894 and it was opened in 1895.

Permanent-way.—The permanent-way consists of 30-lb. flat-footed steel rails on nahor sleepers.

Ballast.—The line is unballasted.

Fencing.—The line is fenced only at stations.

Curves.—In the first mile there are two curves with radii of 500 feet.

Gradients.—The ruling gradient between Tezapore and Rangapara is 1 in 125 and between Rangapara and Balipara 1 in 100.

Terms of contract—

The Tezapore-Balipara Light railway is maintained and worked under—

Terms—contained in the Notification issued by the Chief Commissioner of Assam under letter No. 33, dated the 1st June 1895.

The general conditions are as follows :—

Government aid.—Free use of Government land and a subsidy to the extent of Rs. 5,000, up to the end of March 1909, from the Local Board at Tezapore.

Currency of contract.—The Secretary of State may, after the railway has been opened for fifteen years and thereafter at intervals of seven years, terminate the contract and take over the railway with all its equipments, buildings and property, upon giving 12 months' previous notice and on paying the Company the value of the property as a dividend earning investment together with an additional bonus of 20 per cent. over and above such value.

Terms of working.—The line is worked by the owning company.

Rates and fares.—Certain rates and fares have been fixed.

Statistics of working—

TABLE I.							TABLE II.		
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent on capital outlay.	Subsidy from District Board.	Total income.	Per cent. of total income on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1898 . . .	4,56,927	85,715	20,137	4·41	5,000	25,137	5·51	82	76·49
1899 . . .	4,71,177	95,157	26,136	5·52	1,000	31,136	6·57	91	72·51
1900 . . .	4,87,249	95,981	25,797	5·29	5,000	30,797	6·32	92	73·12
1901 . . .	4,87,241	83,810	16,898	3·17	5,000	21,898	4·49	80	74·84
1902 . . .	4,87,240	85,012	21,651	4·13	5,000	26,651	5·47	81	74·33
1903 . . .	4,87,240	94,742	27,739	5·67	5,000	32,739	6·71	91	70·72
1904 . . .	4,87,240	88,463	17,391	3·54	5,000	22,391	4·57	85	80·43
1905 . . .	4,87,240	1,03,380	27,082	5·55	5,000	32,082	6·58	99	78·80
1906 . . .	4,87,210	1,11,710	34,376	7·17	5,000	39,376	8·20	110	69·51

Number ^{Main head 34} ^{Sub-head (a)} **THATON-DUYINZAIK LIGHT RAILWAY (2' 6" gauge)—****Details of construction—**

The line is 7·76 miles long. Its construction was sanctioned in 1883 and it was opened in 1885.

Permanent-way.—The permanent-way consists of 20-lb. flat-footed steel rails on Dick Kerr's patent iron and pyinkado sleepers.

Ballast.—The line is ballasted throughout with sand, stone and laterite.

Fencing.—The line is unfenced.

Curves.—The sharpest curve has a radius of 207 feet.

Gradients.—The ruling gradient is 1 in 80.

Terms of contracts—

The Thaton-Duyinzaik Light railway is worked under the following :—

Contract of—19th January 1884 (between the Secretary of State and the late Mr. G. E. L. Dawson of Rangoon) for construction and working.

Agreement of—6th June 1896 for working the railway and a steam launch service between Moulmein and Duyinzaik.

The general conditions are as follows :—

Government aid.—Land has been provided at a pepper-corn rent, and the proprietors receive Rs. 350 per mensem for the carriage of mails between Moulmein and Thaton, *via* Duyinzaik, including both steamer and railway journeys.

Currency of contract.—The contract is in force for a period of 99 years. After the railway has been open for 80 years, and thereafter at intervals of 10 years, the Secretary of State can terminate the contract and take over the railway upon giving 12 months' notice, and paying the value of the permanent-way, buildings and rolling-stock, together with a bonus of 25 per cent. on the value. Government may also determine the contract if the railway is not worked for six consecutive calendar months, or if the proprietors fail to carry out the agreement.

Terms of working.—The railway is now worked and maintained by the Irrawaddy Flotilla Company, who bought the concern on the 1st December 1900.

Rates and fares.—Certain maxima have been fixed within which the proprietors are permitted to vary the rates.

Statistics of working—Information not available.

APPENDIX 38—contd.

History of railways constructed and in progress.

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Number ^{Main head 35} _{Sub-head (a)} . **DARJEELING-HIMALAYAN RAILWAY (2' 0" gauge)—**

Details of construction—

The line, which is laid for a great part of its length along the cart road, is 51 miles long. Its construction was sanctioned in 1879 and it was opened through in 1881.

Permanent-way.—The section of the line in the plains is laid with 41½-lb. flat-footed steel rails on wooden sleepers. The hill section was laid with 41½-lb. flat-footed steel rails, these are being renewed with a special section steel rail, 41½ lb. to a yard.

Ballast.—For 9 miles from Siliguri the line has been ballasted with gravel or broken stone, except near Siliguri where sand has been used. On the hill section, where necessary, broken stone ballast has been and is being put in.

Fencing.—The line is unfenced.

Curves.—The sharpest curve has a radius of 60 feet.

Gradients.—The ruling gradient of the greater part of the line is about 1 in 25; from Sukhua to Ghum (summit) and thence to Darjeeling there is a length of about three-fourths of a mile on grades of 1 in 22½ to 1 in 23.

Terms of contract—

The railway is worked under the following contract:—

Contract of—8th April 1879 (between the Secretary of State and the late Mr. Franklin Prestage) for construction, maintenance and working.

The general conditions of the contract are as follows:—

Government aid.—Government undertake to pay the Company such a sum as will make up its gross receipts to two lakhs of rupees annually. Government land and the use of the existing cart road were granted free of cost.

Currency of contract.—If at any period the railway should not be worked for six consecutive months, the Company is to surrender the road and land acquired from Government, receiving any sums due to it for permanent improvements to the road or works connected therewith. After the railway has been opened for 25 years (reckoning from the 4th May 1884) and thereafter at intervals of 10 years, Government have the power, by giving 12 months' previous notice, to terminate the contract and take over the line on payment to the Company of its value as a dividend earning investment, with an additional bonus of 20 per cent. over and above such value.

Power of Company to surrender contract.—Nil.

Terms of working.—After the first five years, and subject to subsequent modifications of clause 16, half the net profits of any year in excess of 5 per cent. on the paid up capital to be applied in repayment to Government of the amount expended on the maintenance of the cart road during the same year or in making good a deficiency in gross receipts. Government are under obligation to uphold and maintain this road at their own expense, subject to their right to be repaid the charges incurred in any year out of one moiety of the surplus profits earned in that year.

Rates and fares.—Certain maxima have been fixed within which the Company is permitted to vary rates.

Statistics of working—

TABLE I.								TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent of net earnings on capital outlay.	Subsidy from Local Government.	Total income.	Per cent. of total income on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1880 . . .	12,32,694	48,483	34,197	2.77	...	34,197	2.77	82	29.46
1881 . . .	18,18,723	2,61,154	1,15,522	6.35	...	1,15,522	6.35	103	55.76
1882 . . .	23,56,112	3,66,474	1,21,983	5.17	...	1,21,983	5.17	141	66.72
1883 . . .	26,50,799	4,21,944	1,55,725	5.87	...	1,55,725	5.87	162	63.11
1884 . . .	27,23,240	4,35,024	1,46,765	5.39	...	1,46,765	5.39	167	66.26
1885 . . .	27,27,623	4,31,103	1,63,350	5.99	...	1,63,350	5.99	163	62.11
1886 . . .	27,32,136	4,96,476	2,41,559	8.86	...	2,41,559	8.86	188	51.28
1887 . . .	27,43,214	4,77,151	2,10,623	7.63	...	2,10,623	7.63	180	55.86
1888 . . .	27,71,926	6,14,893	2,83,327	10.22	...	2,83,327	10.22	233	53.92
1889 . . .	29,40,423	5,74,294	2,29,117	7.80	...	2,29,117	7.80	217	60.10
1890 . . .	29,52,108	5,76,436	2,32,894	7.89	...	2,32,894	7.89	217	59.60
1891 . . .	30,59,693	6,13,387	2,58,253	8.44	...	2,58,253	8.44	231	57.61
1892 . . .	31,09,679	6,35,778	2,66,647	8.57	...	2,66,647	8.57	240	57.46
1893 . . .	31,72,223	6,34,181	2,83,003	8.50	—1,55,418	1,28,485	4.02	239	55.41
1894 . . .	31,77,546	6,96,284	2,66,286	8.10	—29,756	2,26,530	7.13	239	59.27
1895 . . .	31,99,765	7,39,618	3,59,033	11.25	—61,740	2,98,193	9.32	279	50.92
1896 . . .	33,12,732	7,81,594	3,69,607	10.25	—62,087	2,97,590	8.98	294	53.98
1897 . . .	33,15,455	7,44,266	3,38,188	10.05	—55,929	2,77,259	8.36	281	55.28
1898 . . .	33,65,998	7,54,580	3,41,109	10.13	—50,432	2,81,677	8.37	285	54.79
1899 . . .	35,03,469	7,14,985	2,49,770	7.12	—34,933	2,14,837	6.12	270	65.07
1900 . . .	34,99,467	8,09,188	3,61,840	10.34	—64,268	2,97,572	8.50	305	55.28
1901 . . .	34,78,411	7,87,941	3,13,861	9.02	—49,971	2,63,890	7.58	297	60.17
1902 . . .	34,96,507	8,50,280	3,78,005	10.18	—67,704	3,10,301	8.83	321	54.66
1903 . . .	36,18,038	8,61,062	4,16,762	11.51	—79,226	3,37,526	8.79	363	56.65
1904 . . .	37,98,486	10,45,187	4,75,227	12.71	—97,200	3,78,027	10.11	394	53.46
1905 . . .	37,51,562	9,72,644	4,09,514	10.91	—77,631	3,31,883	8.47	367	57.70
1906 . . .	37,43,284	9,50,351	4,02,843	10.76	—75,126	3,27,717	8.75	370	58.91

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112]

Number ^{Main head 36} _{Sub-head (a)} **HOWRAH-AMTA LIGHT RAILWAY (2' 0" gauge)—****Running Powers—***Foreign line over Home line:—*

Howrah-Sheakhala light railway, Telkul Ghat to Kadamtala, (for passenger and goods trains) 2·00 miles.

Details of construction—

There are 37·19 miles of open line, *viz.*, main line (Telkul Ghat to Amta), 27·19 miles, and branch (Bargachia to Autpur), 10 miles. In addition to these 12·50 miles were sanctioned for construction in 1902, but the commencement of work has not yet been authorized. The construction of the main line was sanctioned in 1895 and it was opened in 1898.

Permanent-way.—The permanent-way consists of flat-footed steel rails, 25 lbs. to the yard, on cross sleepers of pyinkado.

Ballast.—The line is ballasted throughout.

Fencing.—The line is unfenced.

Curves.—The sharpest curve, sanctioned specially for the town of Howrah, has a radius of 14½ feet.

Gradients.—The line is practically level throughout.

Terms of contracts—

The Howrah-Amta Light railway is worked on the terms contained in the Bengal Government Notifications No. 111, dated the 26th March 1895, and No. 75-R., dated the 7th April 1902, under the following agreements:—

Agreements of—12th June 1889 (between the District Board of Howrah and the Bengal District Road Tramways Company).

3rd May 1897 (between the District Board of Howrah and the Bengal District Road Tramways Company, Howrah-Amta).

16th August 1901 (between the District Board of Howrah and the Howrah-Amta Light Railway Company).

The general conditions are as follows:—

Aid by the District Board.—As subsidy for payment of interest, the District Board has guaranteed a sum sufficient to make the net earnings equivalent to Rs. 1,100 per annum per mile constructed and opened, limited to a maximum annual payment of Rs. 28,000. The free use of a width of 6 feet along one side of the district road, granted to the Company for the purpose of laying the line, a clear width of 1½ feet being left for vehicular traffic.

Currency of agreement.—The District Board has the power of determining the agreements after 21 years. In the event of the District Board exercising, in conjunction with the District Board of Hooghly and the Municipality of Howrah, the right of purchase conferred upon them by section 41 of Act 3 of 1893 (Bengal Code), the value to be placed upon the railway is to be calculated by adding to the value of the whole undertaking, with all its equipments, as a dividend earning investment, a bonus of 20 per cent. over and above such value.

Terms of working.—Whenever the net earnings of the Company in respect of the railway are in excess of 4 per cent. upon the capital for the time being of the Company, surplus profits are divided between the Company and the District Board in equal proportions.

Rates and fares.—Certain maxima have been fixed within which the Company is permitted to vary its rates.

Statistics of working—

TABLE I.								TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent of net earnings on capital outlay.	Subsidy from District Board.	Total income.	Per cent. of total income on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1898 . . .	11,24,713	1,89,519	78,910	7·02	—15,062	63,848	5·08	152	58·86
1899 . . .	11,41,807	2,50,763	1,12,794	9·88	—27,835	84,959	7·44	168	55·02
1900 . . .	11,88,283	2,56,418	1,23,104	10·36	—30,244	92,860	7·81	172	51·99
1901 . . .	11,96,697	2,60,530	1,14,092	9·53	—26,146	87,946	7·35	175	56·21
1902 . . .	12,68,532	2,65,497	1,33,120	10·49	—29,703	13,417	8·15	178	49·86
1903 . . .	12,88,853	2,77,451	1,37,833	10·69	—31,883	1,05,950	8·22	186	50·32
1904 . . .	15,91,321	2,97,062	1,54,998	9·74	—35,416	1,19,582	7·51	170	7·82
1905 . . .	16,07,464	3,28,722	1,77,464	11·04	—38,862	1,38,602	8·62	170	46·01
1906 . . .	17,90,006	3,51,462	1,77,670	9·98	—38,681	1,38,989	7·76	182	49·45

APPENDIX 38—contd.

History of railways constructed and in progress.

[For Index see page 112.]

Number ^{Main head 97} _{Sub-head (a)} **HOWRAH-SHEAKHALA LIGHT RAILWAY (2' 0" gauge)—**

Running powers—*Home line over Foreign line :—*

Telkul Ghat to Kadamtala, Howrah-Amta Light railway, (for passenger and goods trains) miles 2·00.

Details of construction—

The line is 19·75 miles long, viz., main line (Kadamtala to Sheakhala), 17·38 miles, and Chanditala-Janai branch 2·37 miles. The construction of the main line was sanctioned in 1895 and it was opened in 1897.

Permanent-way.—The permanent-way consists of flat-footed steel rails, 25 lbs. to the yard, laid on cross sleepers of pyinkado.

Ballast.—The line is ballasted throughout.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 144 feet radius at Howrah town.

Gradients.—The line is practically level throughout.

Terms of contracts—

The Howrah-Sheakhala Light railway is worked on the terms contained in the Bengal Government Notification No. 112, dated the 26th March 1895, under the following agreements :—

Agreements of—12th June 1889 (between the District Board of Howrah and the Bengal District Road Tramways Company).

16th July 1889 (between the District Board of Hooghly and the Bengal District Road Tramways Company).

The general conditions are as follows :—

Aid by the District Board.—The District Board of Hooghly have guaranteed to make up the net earnings to Rs. 950 per mile constructed and opened per annum. The free use of a width of 6 feet along one side of the district road, has been granted to the company for the purpose of laying the line, provided that there shall nowhere be a less width of metalled road clear of the inner rail of the line than 16 feet.

Currency of agreement.—The agreement is current for a period of 21 years. In the event of the District Boards exercising, in conjunction with the Municipality of Howrah, the right of purchase conferred upon them by section 41 of Act III of 1883 (Bengal Code), the price to be placed upon the tramway is to be calculated by adding to the value of the whole tramway with all its equipment as then constituted a bonus of 15 per cent. over and above such value.

Terms of working.—Whenever the net earnings of the company are in excess of 4 per cent. upon the capital of the company actually paid up and expended for the time being, surplus profits are divided between the company and the District Board of Hooghly in the proportion of two-thirds to the Company and one-third to the District Board.

Rates and fares.—Certain maxima have been fixed within which the Company is permitted to vary rates.

Statistics of working—

TABLE I.								TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. of net earnings on capital outlay.	Subsidy from District Board.	Total income.	Per cent. of total income on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1898	6,09,398	76,166	16,768	2·75	4,267	21,035	3·45	70	72·12
1899	6,09,434	73,396	21,453	3·52	—250	21,203	3·48	65	70·77
1900	6,09,440	76,019	26,824	4·40	—999	25,825	4·24	74	64·71
1901	6,09,446	75,579	23,165	3·80	1,108	24,273	3·98	77	70·52
1902	6,09,565	82,019	31,789	5·20	—550	31,189	5·12	80	61·38
1903	6,14,715	87,049	44,950	5·68	—668	34,282	5·57	85	59·85
1904	6,14,715	86,261	39,055	6·35	—2,747	36,308	5·91	84	54·72
1905	6,13,008	88,266	38,128	6·21	—2,419	35,709	5·82	86	56·80
1906	6,14,396	90,595	37,047	6·02	—2,548	34,499	5·62	88	59·11

APPENDIX 38—concl'd.

History of railways constructed and in progress.

[For Index see page 112.]

Number—^{Main head 38}_{Sub-head (a)} . JORHAT (STATE) RAILWAY (2' 0" gauge)—

The line was constructed out of Provincial revenues by the Government of Assam for the convenience of the numerous tea gardens in the neighbourhood of Jorhat.

Details of construction—

The line is 31.75 miles long, viz., main line (Borghop to Titabar), 24.75 miles, and Mariani branch, 7 miles. Construction was sanctioned in 1883; the main line was opened in 1887 and the branch in 1885.

Permanent-way.—Excepting 2.51 miles of the line between Jorhat and Gosaigaon, which is laid with steel rails 30-lb. to the yard, the rest of the line, including the section from Gosaigaon to Borghop, is laid with steel rails, 18-lb. to the yard.

Ballast.—The line is unballasted.

Fencing.—The line is not fenced.

Curves.—The sharpest curve is of 480 feet radius.

Gradients.—Four miles on a gradient of 1 in 800.

Terms of contract—

The line is owned and worked by the State.

Statistics of working—

Calendar year.	TABLE I.						TABLE II.	
	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Gain or loss to the State.	Earnings per mile per work.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1884	4,38,333	1,161	—483	...	17,533	—18,016	40	141.60
1885	5,14,641	31,818	—7,455	...	19,395	—26,850	25	123.14
1886	5,84,608	38,271	—13,887	...	22,026	—35,913	28	136.28
1887	6,79,372	49,199	—13,772	...	26,608	—40,300	32	127.99
1888	7,10,376	55,477	75	...	27,807	—27,732	38	90.86
1889	7,33,640	59,685	—3,543	...	29,057	—32,600	42	105.94
1890	7,42,351	61,937	6,162	0.85	29,448	—23,286	44	90.06
1891	7,51,421	64,569	1,483	0.20	30,026	—28,543	47	97.70
1892	7,54,791	66,079	11,789	1.56	30,107	—18,318	48	82.16
1893	7,99,680	69,810	14,436	1.81	32,013	—17,577	52	79.32
1894	8,18,184	71,933	11,201	1.37	32,587	—21,386	52	84.43
1895	8,28,409	84,606	18,720	2.26	32,919	—14,199	61	77.81
1896	8,63,900	89,996	13,745	1.59	33,502	—19,817	65	84.73
1897	9,02,416	96,186	14,124	1.57	36,102	—21,978	69	85.33
1898	9,09,415	95,958	20,135	2.21	36,179	—16,044	70	79.02
1899	9,31,626	96,488	—5,946	...	37,228	—43,174	72	106.16
1900	9,08,643	86,695	—15,664	...	36,341	—52,005	63	118.05
1901	9,01,038	83,181	—4,169	...	36,248	—40,417	56	105.01
1902	8,95,693	86,641	—3,655	...	36,237	—39,892	57	104.72
1903	9,08,843	90,710	13,594	1.51	36,408	—22,814	59	85.01
1904	9,03,781	74,293	—8,840	...	36,260	—40,100	47	105.17
1905	9,08,441	78,600	2,458	0.27	36,450	—34,022	50	96.87
1906	9,09,185	92,540	12,995	1.43	37,419	—24,424	59	85.95

Statement of railway and tramway projects

Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or not.
A			
Abasana-Suigam branch (Bombay)	..... /	.....	.....
Aden railway (Bombay) ...	.....	(i) Aden and Nobat Dakim via Lahej. Alternative (ii) Aden and Sheikh Othman an D'hala.	Not surveyed ... Ditto ...
Agra-Bharatpur railway (United Provinces and Rajputana) (<i>New project</i>).	Bombay, Baroda and Central India railway (Rajputana-Malwa).	Agra and Bharatpur ...	Survey sanctioned ...
Agra-Hathras railway (United Provinces).	Do.	Agra and Hathras ...	Surveyed ..
Allahabad-Benares railway (United Provinces).	Bengal and North-Western railway.	Allahabad and Benares ... Mirzapur Branch ...	Ditto ... Ditto ...
Ammayanayakkanur-Uttamapalaiyam railway (Madras).	South Indian railway ...	Ammayanayakkanur and Uttamapalaiyam.	Surveyed ...
Amraoti-Ellichpur light railway (Central Provinces).	Great Indian Peninsula railway.	Amraoti and Ellichpur ...	Surveyed ...
Amraoti-Sonnair railway (Central Provinces) (<i>New project</i>).	Ditto	Amraoti & Sonnair via Mursi	Under survey ...
Arakan Coast extensions (Burma)	.....	.....	.....
Arsikere-Mangalore railway (Mysore and Madras).	Southern Mahratta railway	Arsikere and Mangalore ...	Surveyed ...
Assam-Burma connection railway (Eastern Bengal and Assam, and Burma).	Assam-Bengal railway.	(i) Chittagong-Akyab-Minhla (Aeng pass route). Alternatives (ii) Lunding-Maripur-Tam mu-Yuwo-Kyathin (Manipur route). (iii) Makum to Mogaung (Hukong Valley route). (iv) Chittagong Zadabin-Prome. Prome to Zadabin ... Taungup branch ... Zadabin to Zibingyi ...	Surveyed ... Do. ... Do. ... Do. ... Reconnoitred ...
Auriya-Rura railway (United Provinces) (<i>New project</i>).	East Indian railway ...	Auriya and some point between Cawnpore and Phaphund (say Rura).	Survey sanctioned ...
Azamgarh-Goshainganj United Provinces.	Bengal and North-Western railway.	Azamgarh and Goshainganj ...	Under survey ...
B			
Bachhwara-Rowsara branch (Bengal).	Bengal and North-Western railway (Tirhoot section).	Bachhwara and Rowsara ...	Not surveyed ...
Badin-Jungshahi extension (Bombay).	.....	.....	.....
Bagalkot-Hungund branch (Bombay)	Southern-Mahratta railway.	Bagalkot and Hungund ...	Surveyed ...

DIX 38-A.

corrected up to 31st December 1906.

Gauge.	Length.	Estimated cost.	REMARKS.
	Miles.	Rs.	
...	...	...	See "Deesa-Tharad railway."
2' 6"	40	...	The consideration of the question of railway construction at Aden has been deferred.
...	
5' 6"	33	...	This line has been proposed with a view to making Agra one of the termini of the Nagda-Mutra railway, which is now under construction.
3' 3½"	30	...	The survey has been completed but the results have not yet been received by the Railway Board.
3' 3½"	91·7	49,48,539	The chief object of this project is to place the metre gauge lines of the Doabs in direct and unbroken communication with the capital of the United Provinces.
3' 3½"	10·3	5,20,000	The line has been brought under construction since the close of the year.
3' 3½"	61·46	...	This line has been proposed by the District Board of Madura who are levying a special cess for promoting railway construction in the district. It was originally intended that the line should start from Dindigul, but at the suggestion of the Agent, South Indian railway, Ammayanayakkarur has been adopted as the point of junction with that line. The survey has been completed and the results are awaited.
2' 6"	30·64	7,92,953	
5' 6"	100	...	
...	...	...	See "Promo-Taungup" and "Zadabin-Zibingyi" under "Assam-Burma connection railway."
2' 6"	135·71	85,43,784	The line is intended to afford connection between the coffee estates on and near the top of the Mysore plateau with Mangalore port. The Arsikere-Hassan section (27·81 miles) is estimated for a metre gauge substructure, owing to the probability of its eventually forming part of the Mysore-Arsikere chord.
3' 3½"	450	7,00,00,000	The results of the surveys of the first three routes were forwarded to the Secretary of State for India in 1896, when the Government of India recorded the opinion that they were unable to support the immediate construction of any of the projected lines: as there was no prospect of any of them being commercially successful, and that, while the Military authorities preferred the Manipur route, the connection was of no urgency from either a political or military standpoint.
3' 3½"	385	6,50,00,000	The fourth and most southerly of these routes includes branches to Taungup and Akyab and was proposed in 1905 by the Government of Burma, who carried out from Provincial funds the survey from Promo to Zadabin and Taungup and the reconnaissance from Zadabin to Zibingyi, and urged the carrying out from Imperial funds of a detailed survey of the Zadabin-Chittagong section, including the Akyab branch. The proposal is under consideration. [See also "Buthidaung-Maungdaw railway".]
3' 3½"	109½	2,48,89,800	
3' 3½"	4	2,72,500	
3' 3½"	170	1,87,00,000	
Not stated, probably 5' 6".	19	...	
3' 3½"	59	...	
3' 3½"	14	5,50,000	
...	...	...	See "Lower Sind branches."
3' 3½"	31	24,41,757	This line will form a feeder to the Bijapur branch of the Southern Mahratta railway.

Statement of railway and tramway projects

Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or not.
<i>B—contd.</i>			
Bahadarpur (Garda)-Songhir extension (Bombay).	Bombay, Baroda and Central India railway (Gaekwar's Dabhoi).	Bahadarpur and Songhir ...	Surveyed ...
Balamau-Sitapur railway (United Provinces).	Oudh and Rohilkhand railway.	Balamau and Sitapur ...	Surveyed ...
Bangalore (Taragupet)-Chikballapur light railway (Mysore).	Southern Mahratta railway.	Bangalore and Chikballapur ...	Surveyed ...
Bankura (or Bishenpur)-Calcutta chord railway (Bengal).	Bengal-Nagpur railway	Bishenpur <i>via</i> Bhandarhati, and Hooghly or Howrah or that neighbourhood.	Surveyed ...
Bansdih road-Maneerghat branch (United Provinces).	Bengal and North-Western railway.	Bansdih road and Maneerghat.	Under survey ...
Baran-Marwar railway (Rajputana).	Bombay, Baroda and Central India railway (Rajputana-Malwa).	Baran and Marwar with extensions— (i) Jehazpur to Nasirabad ... (ii) Jehazpur to Paondero ...	Surveyed ... Do. ... Do. ...
Baran-Nasirabad railway (Rajputana).	.....	.....	.....
Baroda-Savli railway (Bombay) ...	Bombay, Baroda and Central India railway (Gaekwar's Dabhoi).	Baroda and Savli ...	Surveyed ...
Barwaha-Bodeli light railway (Central India).	Bombay, Baroda and Central India railway (Rajputana-Malwa).	Barwaha to Bodeli ... <i>Alternative.</i> Barwaha to Nandod...	Reconnoitred ... Ditto ...
Baura-Matabhangah-Konaghat extension (Eastern Bengal and Assam).	Bengal Doonars railway	Baura and Konaghat ...	See "Remarks" ..
Bausi-Baidyanath railway (Bengal)	East Indian railway ...	(i) Bausi to Baidyanath ... <i>Alternative.</i> (ii) Bausi to Adjai ...	Surveyed ... Do. ...
Belapur (or Lakh)-Sangamner branch (Bombay).	Great Indian Peninsula railway.	Lakh and Sangamner ...	Reconnoitred ...
Bellarpur-Warangal railway (Central Provinces and Hyderabad, Nizam's).	.....	.....	.....
Belo-Shahbunder light railway (Bombay).	.....	.....	.....
Berhampur-Gopalpur light railway (Madras).	.....	.....	.....
Berhampur-Russelkonda light railway (Madras).	.....	.....	.....
Bezwada-Jaggiapett branch (Madras).	Madras railway ...	Bezwada and Jaggiapett ...	Not surveyed ...
Bhagalpur-Nalhati (or Ahmadpur) railway (Bengal).	East Indian railway ...	Bhagalpur and Nalhati or Ahmadpur.	Do. ...

DIX 38-A—continued.

corrected up to 31st December 1906.

Gauge.	Length.	Estimated cost.	REMARKS.																				
	Miles.	Rs.																					
2' 6"	8 (Bahadarpur to Heran river).	5,84,000	The line will be constructed by the Baroda Durbar in whose territory it will entirely lie.																				
5' 6"	37'12	19,45,446	The Secretary of State has approved of the construction of this line as part of the Oudh and Rohilkhand railway.																				
2' 6"	38'99	7,19,765	No application has yet been made to the Railway Board for the construction of this line.																				
5' 6"	See "Remarks."		The length and estimated cost are as follows:— <table> <tr> <td></td><td>Miles.</td><td></td><td>Rs.</td></tr> <tr> <td>Bishenpur to Hooghly</td><td>71'44</td><td>{ Double line</td><td>1,32,55,476</td></tr> <tr> <td></td><td></td><td>{ Single "</td><td>91,02,355</td></tr> <tr> <td>" " Howrah</td><td>81'00</td><td>{ Double "</td><td>1,47,11,125</td></tr> <tr> <td></td><td></td><td>{ Single "</td><td>1,00,74,837</td></tr> </table> <p>To the above has to be added the cost of a bridge over the Hooghly and approaches (double line), estimated at Rs. 72,57,856 for 5'92 miles if constructed at Cossipore, or Rs. 54,46,956 for 5'19 miles, if constructed at Panihati.</p>		Miles.		Rs.	Bishenpur to Hooghly	71'44	{ Double line	1,32,55,476			{ Single "	91,02,355	" " Howrah	81'00	{ Double "	1,47,11,125			{ Single "	1,00,74,837
	Miles.		Rs.																				
Bishenpur to Hooghly	71'44	{ Double line	1,32,55,476																				
		{ Single "	91,02,355																				
" " Howrah	81'00	{ Double "	1,47,11,125																				
		{ Single "	1,00,74,837																				
3' 3½"	13	The line has been proposed by the Bengal and North-Western railway as a feeder to their main line.																				
3' 3½"	213'39	1,36,66,806	Two lines were surveyed in 1898-99, viz., Baran to Nasirabad and Baran to Marwar; the length and cost of the former being 153'29 miles and Rs. 96,11,662, respectively.																				
3' 3½"	60	Not given separately.	The Baran-Kotah section of this line is under construction.																				
3' 3½"	70'85	31,62,877																					
...	See "Baran-Marwar railway."																				
2' 6"	32	...	The results of survey have not yet been submitted.																				
2' 6"	163½	54,28,691	The alternative to Nandod includes a bridge over the Nerbudda, which partly accounts for the higher cost.																				
2' 6"	193½	72,49,284																					
3' 3½"	20	...	The survey of this line by the agency of the Bengal Dooars railway was sanctioned by the Government of India in 1900, but the results have not yet been received.																				
5' 6"	44'43	32,35,066																					
5' 6"	44'94	32,96,899																					
5' 6"	32'86	...	An alternative alignment, four miles shorter, from Belapur <i>via</i> Bablishwar, was also examined but the estimates of cost have not been submitted.																				
...	See "North and South railway."																				
...	See "Light railways in Sind."																				
...	See "Ganjam District Light railways."																				
...	Ditto.																				
5' 6"	54	43,50,000																					
5' 6"	This line will probably be constructed by the East Indian Railway Company.																				

Statement of railway and tramway projects

Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or not.
B—concl'd.			
Bhamo-Momein (Tengyueh) railway (Burma).	Burma railways across a ferry between Bhamo and Katha.	Bhamo and Momein ...	Reconnoitred ...
Bhatni-Bettiah extension (Bengal)	Bengal and North-Western railway.	Bhatni and Bettiah ...	Partly surveyed ...
Bhojudih-Daltonganj railway (Bengal).	Bengal-Nagpur railway	Bhojudih and Daltonganj ...	Surveyed ...
Bilaspur-Mungeli-Mandla railway (Central Provinces).	Bengal-Nagpur railway	Bilaspur and Mandla ...	Under survey ...
Bir-Bhopal railway (Central India and Central Provinces). (<i>New project.</i>)	Great Indian Peninsula railway.	Bir and Bhopal ...	Being reconnoitred ...
Bishenpur (or Bankura)-Calcutta railway.	.....	.....	.....
Bombay-Sind connection railway (Cutch, Sind and Bombay).	Bombay, Baroda and Central India railway.	Viramgam and Badin— (i) Northern route (ii) Cutch route ...	Reconnoitred ... Do. ...
Bombay-Southern Mahratta railway (Bombay).	Southern Mahratta railway.	Karad Road and Hogg Island and Vingorla.	Not surveyed ...
Borawar (or Degana)-Hissar railway (Rajputana and Punjab).	Jodhpur-Bikaner railway	Borawar (or Degana) and Hissar	Under survey ...
Borjan-Suntak tramway (Eastern Bengal and Assam).	Assam-Bengal railway ...	Borjan and Suntak ...	Not surveyed ...
Broach-Jambusar-Masor Road railway (Bombay).	Bombay, Baroda and Central India railway.	Broach and Masor Road ...	Not surveyed ...
Burdwan-Kutwa railway (Bengal)	East Indian railway ...	Burdwan and Kutwa ...	Surveyed ...
Buthidaung-Maungdaw railway (Burma).	.....	Buthidaung and Maungdaw ...	Surveyed for a 2' 0" tramway.
C.			
CACHAR DISTRICT TRAMWAYS—			
Sealtick—Lala Bazar (Eastern Bengal and Assam).	Assam-Bengal railway {	Sealtick and Lala Bazar ...	Reconnoitred by the promoters. Ditto ... Ditto ...
Silchar—Duarbund (Eastern Bengal and Assam).		Silchar and Duarbund ...	
Silchar—Tikalpur (Eastern Bengal and Assam).		Silchar and Tikalpur ...	
Calcutta Central railway (Bengal)	East Indian railway	Howrah and Sealdah ...	Not surveyed ...
Captainganj-Padrauna branch (United Provinces).	Bengal and North-Western railway.	Captainganj and Padrauna ...	Not surveyed ...

DIX 38-A—continued.

corrected up to 31st December 1906.

Gauge.	Length.	Estimated cost.	REMARKS.
	Miles.	Rs.	
2' 6"	124	1,14,42,000	A detailed survey has been sanctioned and is in progress.
3' 3½"	50	...	The survey was carried out in 1903 up to the east bank of the Gandak river, about 42 miles, and was then abandoned by the Bengal and North-Western railway.
5' 6"	171	1,68,00,000	
2' 6"	170	...	This line will shorten the distance between Nainpur, the centre of the Satpura system, and Calcutta by about 56 miles.
5' 6"	110	...	This line has been proposed as an alternative to the doubling of the section from Itarsi to Bhopal.
...	...	...	See "Bankura (or Bishenpur)-Calcutta railway."
5' 6"	269	2,12,73,000	These routes were reconnoitred during 1906. Both start from Viramganj and terminate at Badin. The northern route passes through Radhanpur, Suigam, Nagar Parker and Rohim-ki-Bazar, while the southern route, which traverses the territory of His Highness the Rao of Cutch, goes <i>via</i> Malia, Anjar, Bhuj and Lakhpat.
5' 6"	304	2,36,14,250	
3' 3½"	202	1,58,09,000	
3' 3½"	180	33,07,790	This line has been proposed by the Jodhpur and Bikaner Durbars for construction and working as part of the Jodhpur-Bikaner railway. It will be about 200 miles in length if Degana be taken as the initial point. It will probably supersede the Kuchaman-Sirsa chord railway.
{ 6 miles 3' 3½" 2 " 2' }	8	...	
	31	...	The Baroda Durbar offered to construct the line in 1903, but have since abandoned it.
	34	26,49,418	This line will probably be constructed by the East Indian railway as part of their undertaking when funds are available.
3' 3½"	17.25	...	The Arakan Company, Limited, are negotiating with the Government of Burma for the construction of this line, with the possibility of its ultimate absorption in the Promc-Zadabin-Chitragong scheme. [See "Assam-Burma railway connection".] This proposal is under consideration. The original proposal by the Company was for a 2' 0" tramway (for which alone a survey has been made) at an estimated cost of Rs. 9,49,858. It has since been dropped.
			The Railway Board have approved of a survey being carried out on the 3' 3½" gauge at the expense of Government.
2' 6"	24	14,75,405	These lines were proposed in the interests of the tea industry and as feeders to the Assam-Bengal railway. The proposals fell through owing to the inability of the Local Administration to guarantee interest on capital at 3 per cent. per annum which the promoters had asked for.
2' 6"	22		
2' 6"	14		
5' 6"	...	£1,500,000	The scheme comprised a permanent road and railway bridge over the Hooghly at the site of the existing floating bridge, a central passenger station at Calcutta and an elevated junction railway to unite the East Indian and Eastern Bengal State railways and the Kidderpore docks. The estimated cost represents the total capital proposed to be raised, the figure being increased to £2,750,000 if a broad avenue to afford access to the Central station from Howrah be included in the scheme. In view of the objections of the Special Committee appointed to report on the scheme, the opinions expressed by the Government of Bengal and the fact that the project did not receive the support of those most interested in its execution, the offer made in 1898 by a Syndicate to form a company to undertake the work was not accepted.
3' 3½"	18	...	

Statement of railway and tramway projects

Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or not.
<i>C—concl'd.</i>			
Cawnpore-Banda railway (United Provinces) (<i>New project</i>).	Great Indian Peninsula railway.	Cawnpore to Banda <i>via</i> Hamirpur and Maudha, with a branch from Maudha to Harpalpur <i>via</i> Rath.	Under survey ...
Cawnpore-Hamirpur railway (United Provinces).	East Indian railway ...	Cawnpore to the river Jumna opposite Hamirpur.	Not surveyed ...
Cawnpore-Rae Bareli-Fyzabad railway (United Provinces).	Great Indian Peninsula railway.	Cawnpore and Fyzabad ...	Partly surveyed ...
Changa Manga-Chunian-Pakpatan branch (Punjab).	North Western railway	Changa Manga and Pakpatan ...	Not surveyed ...
Chansama-Harij railway extension to Kathi (Bombay) (<i>New project</i>).	Bombay, Baroda and Central India railway (Gackwar's Mchana)	Harij and Kathi ...	Not stated ...
Chicacole Road—Calingapatam light railway (Madras).	}	...	...
Chicacole Road-Gunipur light railway (Madras).			
Chicacole Road—Parvatipur light railway (Madras).			
Chhor-Tatta railway (Bombay) ...	...	...	...
Chupra-Mashrak railway (Bengal)	Bengal and North-Western railway.	Chupra and Mashrak ...	Under survey ...
Cuddalore-Vriddhachalam railway (Madras).	South Indian railway ...	Cuddalore and Vriddhachalam...	Surveyed ...
<i>D.</i>			
Dacca-Aircha extension (Eastern Bengal and Assam).	...	...	...
Dacca-Mymensingh railway extensions (Eastern Bengal and Assam)	Dacca section, Eastern Bengal State railway.	(i) Dacca to Aircha <i>Alternative.</i> Tangi, <i>via</i> Dassora, to Aircha. (ii) Mymensingh, <i>via</i> Netrokona to Bara Ari, with a branch from Shambhuganj to Gauripur.	Surveyed ... Do. ... Do. ...
		(iii) Singhjani, <i>via</i> Sherpur, to Nalitabari.	Do. ...
		(iv) Netrokona to Langar Bazar	Do. ...
Dalla-Dedaye railway (Burma) ...	Burma railways ...	Dalla to a point opposite Dedaye With a branch to Twante ...	Reconnoitred ... Do. ...
Damoh-Atarra light railway (Central Provinces and Central India).	Great Indian Peninsula railway.	Damoh and Atarra ...	Do. ...
Darbhanga-Khagaria chord (Bengal).	Bengal and North-Western railway. (Firhoot section.)	Darbhanga and Khagaria ...	Under survey ...
Darrang District tramway (Eastern Bengal and Assam).	.....	.....	.....

DIX 38-A—continued.

corrected up to 31st December 1906.

Gauge.	Length.	Estimated cost.	REMARKS.
	Miles.	Rs.	
5' 6"	147	...	This will include the Cawnpore-Hamirpur railway project.
...	35½	...	The line is assumed to cost Rs. 15,000 per mile on the 2' 6" gauge. Proposals were received in 1904 for its construction as a steam tramway on the 2' gauge. The District Board of Cawnpore agreed to guarantee interest on working capital at 4 per cent. on condition of receiving a moiety of surplus profits. In 1905 the promoters intimated that they did not desire to proceed with the scheme. The Cawnpore-Banda railway will include this line.
5' 6"	140	1,12,00,000	This line was proposed by the late Indian Midland Railway Company in 1899. The Cawnpore-Rae Bareilly section, 58 miles, has been surveyed by the Oudh and Rohilkund railway, and the results are awaited.
5' 6"	70	56,00,000	This branch was selected by the Committee, appointed by the Punjab Government in 1896 to report upon railway feeders, as the most suitable out of many projects put forward for serving the rich irrigated tract on the right bank of the Sutlej. The major portion of this line will be merged in the Patti-Lodhran railway, which is at present under survey.
3' 3½"	7½	...	This line will probably be constructed by the Baroda Durbar in whose territory it will entirely lie.
...	...	...	See under "Ganjam District light railways."
...	...	...	See under "Light railways in Sind."
3' 3½"	21	...	
3' 3½"	34	...	The results of survey have not yet been received by the Railway Board.
...	...	...	See under "Dacca-Mymensingh railway extensions."
3' 3½"	45	76,71,060	
3' 3½"	45	75,72,105	
3' 3½"	36½	27,26,812	Includes the cost of a bridge over the Brahmaputra. If a ferry, instead of a bridge, be provided, the cost would be Rs. 20,92,797. Proposals were received in 1904, from a Syndicate, for the construction of the Mymensingh-Netrokona railway on the metre gauge and of the Singhjani-Sherpur-Nalitabari line on the 2' 6" gauge. The promoters were informed in the same year of the terms on which a concession could be granted.
3' 3½"	25	12,38,886	For a well equipped line, with ferry. For a cheap line with, and without, ferry the cost is estimated at Rs. 9,21,250 and Rs. 8,40,250, respectively.
3' 3½"	50½	...	The results of survey are awaited.
3' 3½"	34½	16,85,814	The line was proposed to serve the delta of Lower Burma. It would have to contend against keen river competition and, therefore, its prospects are not promising.
3' 3½"	14½	7,11,472	
2' 6"	151	27,18,000	This line was put forward by the late Indian Midland Railway Company in 1899 as a feeder to their railway system.
3' 3½"	59	...	
...	...	...	See "Mangaldai tramway."

Statement of railway and tramway projects

Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or not.
D.—concl'd.			
Deesa-Tharad railway (Bombay)...	Bombay, Baroda and Central India railway (Palarpur-Deesa).	Deesa to Tharad with branches— (i) Diodar to Radhanpur. (ii) Abasana to Suigam ...	} Surveyed ... Do. ...
Degana (or Borawar)-Hissar railway (Rajputana and Punjab).	... ..	.....	.....
Dehra-Mussooree-Landour railway (United Provinces).	Oudh and Rohilkund railway. (Hardwar-Dehra.)	Dehra to Mussooree ... Mussooree to Landour ...	Surveyed ... Not surveyed ...
Dehra Ghazi Khan-Sakhi Sarwar branch (Punjab).	North Western railway...	Dehra Ghazi Khan and Sakhi Sarwar.	Do. ...
Dhak branch (Punjab) (<i>New project</i>).	Ditto ...	Dhak to the foot of the hills near Katha.	Under survey ...
Dharmapuri-Bangalore railway (Madras and Mysore).	Madras railway ...	Dharmapuri <i>via</i> Palakodu to Bangalore with a branch from Palakodu to Krishnagiri.	Surveyed
Dholka-Dhandhuka-Ranpur extension (Bombay).	Bombay, Baroda and Central India railway (Ahmedabad-Dholka).	Dholka to Dhandhuka <i>via</i> Fedra <i>Alternative.</i> Dholka to Dhandhuka <i>via</i> Gamph Dhandhuka to Ranpur ...	Do. Do. Reconnitred ...
Dhulia-Amalner branch (Bombay).	Great Indian Peninsula railway.	Dhulia and Amalner ...	Surveyed
Dindigul-Palghat railway (Madras)	South Indian railway ...	Dindigul to Palni ... Palni to Palghat <i>via</i> Pollachi and Kollengode.	Do. Do.
Dindigul-Uttamapalaiyam railway (Madras).	.....	.....	.....
Diodar-Radhanpur branch (Bombay).	... ..	.....	.....
Dodbele-Kolar gold-fields railway (Mysore) (<i>New project</i>).	Southern Mahratta railway (Mysore section).	Dodbele to the Kolar gold-fields...	Not surveyed ...
Dudhwa branch extension to Ramnagar ghat (United Provinces).	Rohilkund and Kumaon railway.	Sonaripur and Ramnagar ghat ...	Surveyed ...
Dusi-Salur light railway (Madras)	Bengal-Nagpur railway	Dusi to Salur <i>via</i> Bobbili with a branch from Paddapenki to Parvatipur.	Not surveyed ...
F			
Fatehpur-Markundi chord (United Provinces).	East Indian railway ...	Fatehpur to Markundi ... <i>Alternatives.</i> (i) Fatehpur to Karwi ... (ii) Khaga to Manikpur ...	Surveyed Do. Do.
G.			
Gadag-Yalvigi railway (Bombay)	Southern Mahratta railway.	Gadag to Yalvigi with gold mine branches— (1) Gadag to Kabulayatkatti ... (2) Nabapur on (1) to Sangli ... (3) Beldahadi on (1) to Hosur ...	Surveyed Do. Do. Do.
Gajroula-Chandpur railway (United Provinces).	Oudh and Rohilkund railway.	Gajroula and Chandpur ...	Do.

DIX 38-A.—continued.

corrected up to 31st December 1906.

Gauge.	Length.	Estimated cost.	REMARKS.
	Miles.	Rs	
3' 3½"	84.84	22,71,957	This line will be an extension of the existing Palanpur-Deesa railway.
3' 3½"	16	...	The results of survey have not yet been received.
...	...	...	See "Borawar (or Degana)-Hissar railway."
2' 0"	27	3,52,895	An alternative to the Dehra-Mussooree project would be to extend the Hardwar-Dehra railway on the 5' 6" gauge to Rajpur or some place at the foot of the hills and to connect Mussooree by a rope incline.
...	
5' 6"	35	35,00,000	
5' 6"	10	...	This line has been proposed chiefly in the interests of coal trade.
2' 6"	92	...	The surveys have been completed and the results of survey are awaited.
3' 3½"	38.64	...	The surveys have been completed and the results are awaited.
3' 3½"	44.50	...	
3' 3½"	16½	4,62,000	
5' 6"	20	20,00,000	
3' 3½"	35.21	33,52,000	
5' 6"	35.21	44,47,000	The South Indian railway has been authorized to prepare an estimate for this line on the 3' 3½" gauge.
5' 6"	77.68	99,02,257	
...	...	...	See "Remarks" against "Ammayanayakanur-Uttamapalaiyam railway."
...	...	...	See "Deesa-Tharad railway," of which this line is proposed to form a branch.
3' 3½"	80	...	This line has been urged by the Mysore Durbar in consideration of its administrative advantages and as likely to develop a rich and populous part of the State. The Government of India have approved of a reconnaissance being carried out at the cost of the Mysore Durbar to ascertain its financial prospects.
3' 3½"	20.79	4,58,891	This line is intended primarily to serve the Government forests.
2' 6"	65	...	This line, which is situated in the Vizagapatam district, was proposed by an English Syndicate who put forward proposals for the construction of certain light railways on the 2' 6" gauge in the Ganjam District.
5' 6"	72.2	98,46,166	
5' 6"	52.0	72,59,200	
5' 6"	56.7	85,98,362	
3' 3½"	33.58	...	This line is intended to form a chord between the main line and the Harihar branch of the Southern Mahratta railway. Part of it will also supply a branch to the Dharwar goldfields. The surveys have been completed and the results are awaited.
3' 3½"	13.65	...	
3' 3½"	5.39	...	
3' 3½"	2.87	...	
5' 6"	22.15	5,05,953	

Statement of railway and tramway projects

Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or not.
<i>G—concl'd.</i>			
Ganges bridge :— at Godagari (Eastern Bengal and Assam). or at Sara (Eastern Bengal and Assam).	Eastern Bengal State railway, Katihar extension.	Lalgola and Godagari ...	Surveyed ...
Ganjam District light railways (Madras).	Eastern Bengal State railway, Northern section.	Damukdia and Sara ...	Do. ...
The lines comprised in this scheme are :—			
(i) Berhampur-Gopalpur (Madras).	Bengal-Nagpur railway	Berhampur and Gopalpur ...	Not surveyed ...
(ii) Berhampur-Russelkonda (Madras).	Ditto.	Berhampur and Russelkonda ...	Surveyed ...
(iii) Chicacole road-Calingapatam (Madras).	Ditto.	Chicacole road and Calingapatam ...	Not surveyed ...
(iv) Chicacole road-Gunipur (Madras).	Ditto.	Chicacole road and Gunipur ...	Not surveyed ...
(v) Chicacole road-Parvatipur (Madras).	Ditto.	Chicacole road and Parvatipur ...	Not surveyed ...
(vi) Parlakimedi-Baruva (Madras).	Ditto.	Parlakimedi and Baruva ...	Not surveyed ...
Garda (Bahadarpur)-Songhir extension (Bombay).	.....	.....	.....
Gheria extension (Bengal) ...	Eastern Bengal State railway.	Lalgola and a point on the mouth of the Bhagirathi river near Gheria.	Surveyed ...
Goalando-Narayangunj extension (Eastern Bengal and Assam).	Eastern Bengal State railway.	Lakhee Khal Hat (opposite Faridpur) and Munshiganj.	Do. ...
Godagari bridge (Eastern Bengal and Assam).	.....	.....	.....
Gogra bridge at Chand-deara Ghat (United Provinces).	Bengal and North-Western railway.	Chand-deara Ghat and Manjhee Ghat.	Surveyed ...
Guntur-Repalli branch (Madras)	Southern Mahratta railway.	Guntur and Repalli ...	Surveyed ...
Gurumaishini-Sini railway (Bengal)	Bengal-Nagpur railway ...	Gurumaishini and Sini ...	Do. ...
<i>H.</i>			
Hajiganj-Shatnal branch (Eastern Bengal and Assam).	Assam-Bengal railway	Hajiganj and Shatnal . . .	Surveyed . . .
Hansi-Jakhal railway (Punjab)	Bombay, Baroda and Central India railway (Rajputana-Malwa).	Hansi and Jakhal . . .	Surveyed . . .
Harda-Hindia railway (Central Provinces).	Great Indian Peninsula railway.	Harda and Hindia . . .	Not surveyed . . .
Hardoi-Sandi branch (United Provinces).	Oudh and Rohilkhand railway.	Hardoi and Sandi . . .	Surveyed . . .
Harpalpur-Kalpi light railway (United Provinces).	Great Indian Peninsula railway.	Harpalpur and Kalpi . . .	Partly surveyed . . .

DIX 38-A.—continued.

corrected up to 31st December 1906.

Gauge.	Length.	Estimated cost.	REMARKS.
	Miles.	Rs.	
Undecided (probably mixed 5' 6" and 3' 3½")	...	1,10,00,000	The Committee appointed by the Government of India to investigate and report on the bridging of the Ganges have, since the close of the year, submitted their report, which is under the consideration of the Government.
Ditto	...	1,30,00,000	
2' 6"	8	2,00,000	These lines were put forward by an English syndicate who proposed to take over from the Raja of Parlakimedi the 2' 6" gauge railway between that place and Naupada.
2' 6"	49'08	14,90,711	
2' 6"	24	6,00,000	
2' 6"	65	17,85,000	
2' 6"	42	10,50,000	
2' 6"	35	8,75,000	
...	...	...	See "Bahadarpur (Gadla)-Songhir extension".
5' 6"	13'47	9,18,960	The object of the scheme is to provide a <i>ghat</i> station, which can be relied on in the high-water season, on the right bank of the Ganges for the Godagari-Lalgola ferry. It has been decided to await the results of working at Lalgola ghat before undertaking the construction of the line.
3' 3½"	40	58,46,738	The project provides for an ordinary transshipment ferry between Lakhce Khal Hat and Faridpur, and a wagon and passenger ferry at Munshiganj.
...	...	...	See "Ganges bridge".
3' 3½"	...	See "Remarks."	The cost of bridge and approaches is Rs. 31,15,511, but including the cost of raising capital and the interest on capital during construction, it amounts to Rs. 35,51,682. The project is under revision in accordance with the instructions sent out by the Board of Directors in England.
3' 3½"	38	17,33,687	The District Board of Guntur are desirous of constructing this line. The Government of Madras have been asked to report whether there is any prospect of the District Board being able to raise the necessary capital without State assistance.
5' 6"	44	32,27,438	This line has been projected in connection with Messrs. Tata & Sons' scheme for iron and steel works near Sini.
3' 3½"	24'39	32,81,500	This project is for the establishment of a connection between the Assam-Bengal and the Eastern Bengal State railways by means of a wagon ferry between Shatnal and Narayanganj on the Goalundo-Narayanganj extension of the latter line.
3' 3½"	50'57	20,45,764	This line would connect the Southern Punjab railway at Jakhal with the Rajputana-Malwa railway at Hansi. It may, however, be superseded by the proposed extension of the Patiala-Jakhal railway <i>via</i> Hissar to Narnaul.
.....	.....	.....	This railway was recommended as a feeder line by the Great Indian Peninsula railway.
5' 6"	14'39	3,62,004	
2' 6"	102	15,90,924	Only the Harpalpur-Rath section (25'88 miles) was surveyed by the late Indian Midland railway for a 2'0" gauge line, from the results of which the present estimates have been prepared. This line will probably be superseded by the Cawnpore-Hamirpur-Banda railway with a branch from Maudha <i>via</i> Rath to Harpalpur, for which the Government of the United Provinces has expressed a preference.

Statement of railway and tramway projects

Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or not.
H - conclud.			
Harpalpur-Nowgong light railway (United Provinces and Central India).	Great Indian Peninsula Railway.	Harpalpur and Nowgong . . .	Surveyed . . .
Henzada-Pantanaw railway (Burma) (<i>New project</i>).	Burma railways ...	Henzada and Pantanaw ...	Reconnoitred ...
Hsipaw-Mong Nai extension (Burma).	Ditto ...	Hsipaw to Manpan ... Manpan to Mong Nai ...	Surveyed ... Not surveyed ...
Hyderabad-Kistna river railway (Hyderabad, Nizam's).	Nizam's Guaranteed State railway.	Hyderabad and Kistna river ...	Surveyed ...
Hyderabad (or Kotri)-Karachi railway (Bombay).	...	...	...
I.			
Idar Road.—Brahma Khed extension (Bombay).	Bombay, Baroda and Central India railway (Ahmedabad-Parantij).	Idar Road and Brahma Khed ...	Surveyed ...
Itarsi.—Ellichpur railway (Central Provinces).	Great Indian Peninsula railway.	Itarsi and Ellichpur ...	Not surveyed ...
Itarsi.—Nagpur railway (Central Provinces).	.....	.....	.....
Itarsi.—Wardha railway (Central Provinces).	.....	.....	.....
J.			
Jalesar Road—Kasganj tramway (United Provinces).	Bombay, Baroda and Central India railway (Rajputana-Malwa).	Jalesar Road and Kasganj .	Not surveyed . .
Jammu-Srinagar railway (Kashmir).	North Western railway .	Jammu and Srinagar. The alternative routes are :— (i) Larulari-Banihal route . (ii) Chenab Valley-Banihal route. (iii) Golabgarh route .	Surveyed . Do. . . Do. . .
Jamnagar-Salaya extension (Kathiawar, Bombay).	Bhavnagar-Gondal-Junagad-Porbandar railway (Rajkot-Jamnagar).	Jamnagar and Salaya . . .	Not surveyed . .
Jehazpur-Nasirabad extension (Rajputana).	.....	.....	.....
Jehazpur-Paondero extension (Rajputana).	...	.....	.....
Jhang-Sangla railway (Punjab) .	North Western railway .	Jhang and Sangla . . .	Surveyed . . .
Jullundur Doab group lines (Punjab) (<i>New project</i>).	North Western railway .	Hoshiarpur and Nawa Shahr .	Under survey . .

Part A—continued.

corrected up to 31st December 1905.

Gauge.	Length.	Estimated cost.	REMARKS.												
	Miles.	Rs.													
2' 6"	19'22	2,71,762	This line was surveyed by the late Indian Midland railway on the 2' 6" gauge, on the results of which the present estimates are based.												
3' 3½"	53	32,58,228	A detailed survey of this line has been sanctioned since the close of the year.												
3' 3½"	50	35,61,178	The Government of Burma consider the Southern Shan States railway to be more urgent than this line.												
...													
3' 3½"	See "Remarks"	See "Remarks"	This line has been surveyed by the Nizam's Government, but the results have not yet been received by the Railway Board. It will be about 148 miles in length and will cost Rs. 1,23,68,000 roughly. In conjunction with the Kurnool-Dhone line it will form the southern portion of the through metre gauge connection between Northern and Southern India.												
...	See "Light railways in Sind."												
3' 3½"	33'91	...	The proposals for the construction of this line by the Ahmedabad-Parantij Railway Company are under consideration. The surveys have been completed and the results are awaited.												
...	This railway was recommended as a feeder line by the Great Indian Peninsula railway. It will be partly superseded by the projected Itarsi-Nagpur railway.												
.....	See "North and South railway".												
.....	See "North and South railway".												
2' 6"	50	15 to 20 lakhs	The Raja of Awa has applied to the Government of the United Provinces for a concession for this line with permission to utilize the existing road and the canal and road bridges for laying the line on.												
2' 6"	186½	2,38,61,500	The connection with Srinagar <i>via</i> Sarai Kala and Abbottabad which is more feasible has been decided upon, <i>vide</i> "Sarai Kala-Abbottabad Srinagar railway."												
2' 6"	173	2,54,57,500													
2' 6"	156'17	3,34,73,596	This project would probably be undertaken at the expense of the Jam-nagar Durbar.												
3' 3½"	35													
.....	} See "Baran-Marwar railway."												
.....													
5' 6"	74'40	36,98,588	This line will be constructed by the State as an integral part of the North Western railway. Complete report is awaited.												
5' 6"	122½	The projected railway starts at Hoshiarpur and passes through Adam-pur, Jullundur, Kapurthala, Sultanpur, Malsian, Nakodar, Nur Mahal, Rur Kha and Phagwara to Nawa Shahr with branches from Nawa Shahr to Garhshankar on the north and Bahon on the south. The following sections of the line were previously surveyed and estimated for :—												
			<table> <tr> <th></th><th>Miles.</th><th>Gauge.</th><th>Cost.</th></tr> <tr> <td>Jullundur-Hoshiarpur</td><td>23'92</td><td>5' 6"</td><td>14,10,000</td></tr> <tr> <td>Jullundur-Sultanpur</td><td>28'82</td><td>2' 6"</td><td>10,41,376</td></tr> </table>		Miles.	Gauge.	Cost.	Jullundur-Hoshiarpur	23'92	5' 6"	14,10,000	Jullundur-Sultanpur	28'82	2' 6"	10,41,376
	Miles.	Gauge.	Cost.												
Jullundur-Hoshiarpur	23'92	5' 6"	14,10,000												
Jullundur-Sultanpur	28'82	2' 6"	10,41,376												
			The preparation of alternative projects for the whole line on the 5' 6" and 2' 6" gauges has been asked for.												

Statement of railway and tramway projects

Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or not.
J.—concl'd.			
Jullundur-Hoshiarpur railway (Punjab).	.....	.....	.....
Jullundur-Kapurthala-Sultanpur railway (Punjab).	....	.....	.....
K.			
Kalaura-Chhatak tramway (Eastern Bengal and Assam).	.....	... ..	.....
Kalikiri Rayachoti branch (Madras).	South Indian railway	K. Iikiri or Piler and Rayachoti	Surveyed . . .
Kamptee-Deolapar railway (Central Provinces).	Bengal-Nagpur railway	Kamptee to Deolapar with a branch from Munsar to Ramtek.	Not surveyed . .
Kangra Valley railway (Punjab)	North Western railway	Pathankot to Palampur with a branch from Aund to Durera.	Reconnitred . .
Karauli branch (Rajputana)	.. ..	Gungapur and Karauli	Not surveyed . .
Karimganj-Chanli Khira tramway (Eastern Bengal and Assam).	.....	.....	.....
Karnal-Kuthal-Nabha branch (Punjab).	East Indian railway (Delhi-Umballa-Kalka).	Karnal and Nabha	Not surveyed. . .
Karwi-Rajapur railway (United Provinces).	Great Indian Peninsula railway.	Karwi to Rajapur direct <i>Alternative.</i>	Under survey . .
Kathgodam-Naini Tal branch (United Provinces).	Rohilkund and Kumaon railway.	Karwi to Rajapur <i>via</i> Pahari.	Ditto.
Khamgaon-Jalna railway (Central Provinces and Hyderabad, Nizam's).	Great Indian Peninsula railway.	Kathgodam and Naini Tal ...	Not surveyed. . .
Khandwa-Akola-Nanded railway (Central Provinces and Hyderabad, Nizam's).	Bombay, Baroda and Central India railway (Rajputana-Malwa)	Khamgaon and Jalna ...	Surveyed. . . .
Khanpur-Chachran railway (Punjab).	North Western railway	Khandwa and Nanded ...	Surveyed. . . .
Khijadia-Amreli railway (Kathiawar, Bombay).	Bhavnagar-Gondal-Junagad-Forbandar railway.	Khanpur and Chachran ...	Surveyed
Kissengunge-Jalpaiguri railway (Eastern Bengal and Assam).	Bhavnagar-Gondal-Junagad-Forbandar railway.	Khijadia and Amreli... ..	Partly surveyed ...
Kissengunge-Jalpaiguri railway (Eastern Bengal and Assam).	Eastern Bengal State railway.	Kissengunge and Jalpaiguri ...	Surveyed
Kosamba-Velachha—Zankava-Vajipur branch (Bombay).	Bombay, Baroda and Central India railway.	Kosamba and Vajipur ...	Do.
Kotri (or Hyderabad)-Karachi light railway (Bombay).	.....	.....	.....
Krishnagar-Jalanghi railway (Bengal).	Eastern Bengal State railway.	Krishnagar and Jalanghi ...	Surveyed
Kuchaman-Sirsa chord (Rajputana and Punjab).	Bombay, Baroda and Central India railway (Rajputana-Malwa).	Kuchaman and Sirsa ...	Not surveyed ...

DIX 38-A—continued.

corrected up to 31st December 1906.

Gauge.	Length.	Estimated cost.	REMARKS.
	Miles.	Rs.	
.....	.....	.....	} See "Jullundur Doab group lines."
.....	
.....	.....	.....	See "Sylhet District tramways."
3' 3½"	34.42	10,75,736	
2' or 2' 6"	34.5	.....	This line is designed to carry the produce of the manganese mines in the Ramtek area. The Kamptee-Ramtek railway, which has been sanctioned for construction, supersedes a part of this project.
2' 6"	87	57,85,440	The scheme as originally proposed contemplated a main line from Pathankot <i>via</i> Palampur, Baijnath, Mundi, Suket, Bilaspur, Nalagarh and Rupar to some point on the North Western railway between Ludhiana and Sirhind, with branches to Dalhousie, Dharamsala, Sultanpur, Kalka and Simla. A concession was, however, granted to a London syndicate for the construction of the section from Pathankot to Palampur with a branch to Dunera. The concession has since lapsed.
Not stated	25	.....	This branch was proposed by the Karauli Durbar with a view to undertaking earthwork as a measure of famine relief. It will connect Karauli with the Nagda-Muttra railway at Gungapur.
.....	.....	.....	See "Sylhet District tramways."
5' 6"	70	56,00,000	
5' 6"	18	...	
5' 6"	21	...	
2'	13	12,00,000	This line was proposed by private enterprise in 1895 and a concession was granted for its construction, which lapsed in 1898.
2' 6"	93.55	32,65,151	
3' 3½"	252.25	1,90,00,000	This line will form the northern portion of the through metre gauge connection between railways in Northern and Southern India.
5' 6"	23.27	.....	The results of survey have not yet been received by the Railway Board. The line will connect with Mithankot by means of a steam ferry between that place and Chachran.
3' 3½"	10½	.....	This line was proposed by the Baroda Durbar with a view to undertaking earthwork as a measure of famine relief. The Machiala-Amreli Section, about 6 miles, has been surveyed by the Durbar. The Durbar has since proposed its extension <i>via</i> Chalala and Khamba to Velan Bunder.
3' 3½"	63.67	.....	The results of survey have not yet been received by the Railway Board. The line will afford an alternative route, <i>via</i> the Rapaghat-Katihar railway for traffic between Calcutta and Darjeeling.
2' 6"	63.55	.....	The line was surveyed by the Bombay, Baroda and Central India railway in 1900, but no detailed project has yet been submitted.
.....	.....	.....	See "Light railways in Sind."
2' 6"	56.10	14,00,000	The detailed project and estimates for this line have been received, but are held in abeyance pending proposals from the Government of Bengal.
3' 3½"	170	58,31,000	This line will probably be superseded by the Borawar-Hissar railway projected by the Jodhpur and Bikaner Durbars.

Statement of railway and tramway projects

Name of projects, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or not.
K—concl'd.			
Kumbakonam-Mannargudi branch (Madras).	South Indian railway ...	Kumbakonam and Mannargudi...	Surveyed ...
Kunch-Madhogarh railway (United Provinces).	Great Indian Peninsula railway. (Indian Midland).	Kunch <i>via</i> Jalaon to a point on the Jumna opposite Auriya with a branch from Jalaon to Madhogarh.	Surveyed ...
Kurla-Trombay railway (Bombay)	Great Indian Peninsula railway.	Kurla and Trombay ...	Surveyed ...
Kutwa-Ahmadpur railway (Bengal)	East Indian railway.	Kutwa and Ahmadpur ...	Surveyed ...
L.			
Lakh (or Belapur)-Sangamner branch (Bombay).	.....	.....	.....
Lalgola-Gheria extension (Bengal)	.....	.....	.....
Larkhana-Kambar-Shahdadpur railway (Bombay).	North Western railway	Larkhana and Shahdadpur ...	Surveyed ...
Lashio-Kunlong extension (Burma)	Burma railways ...	Lashio to the Kunlong ferry. The alternative routes are :— (1) Hsenwi (Theinni) ... (2) Hsupkyet (Supkyet) ...	Reconnoitred ...
Light railways in Sind (Bombay)—			
The lines comprised in the scheme are :—			
(1) Mirpur Khas-Jhudo ..	Jodhpur-Bikaner railway (Jodhpur-Hyderabad).	Mirpur Khas and Jhudo ...	Not surveyed ...
(2) Mirpur Khas-Sangur ...	Jodhpur-Bikaner railway (Jodhpur-Hyderabad).	Mirpur Khas and Sangur ...	Not surveyed ...
(3) Shadipalli-Mehoo Suboo...	Jodhpur-Bikaner railway (Jodhpur-Hyderabad).	Shadipalli and Mehoo Suboo ...	Not surveyed ...
(4) Shadipalli-Samara with a possible extension thereof to meet (5).	Jodhpur-Bikaner railway (Jodhpur-Hyderabad).	Shadipalli <i>via</i> Samara to a point on (5).	Not surveyed ...
(5) Chhor-Tatta ...	Jodhpur-Bikaner railway (Jodhpur-Hyderabad).	Chhor and Tatta ...	Not surveyed ...
(6) Mirpur Buttora-Dhindee...	.....	Mirpur Buttora on (5) to Dhindee	Not surveyed ...
(7) Belo-Shahbunder ...	.....	Belo on (5) to Shahbunder ...	Not surveyed ...
(8) Hyderabad (or Kotri)-Karachi.	Jodhpur-Bikaner railway (Jodhpur-Hyderabad).	Hyderabad (or Kotri) <i>via</i> Tatta to Karachi.	Not surveyed ...
or Tatta-Karachi ...	.....	Tatta to Karachi ...	Not surveyed ...
Lower Sind branches (Bombay)—			
The lines at present comprised in the scheme are :—			
(1) Badin-Jungshahi ...	North Western railway...	Badin and Jungshahi ...	Surveyed ...
(2) Tando Muhammed Khan-Mirpur Buttora.	Do.	Tando Muhammed Khan and Mirpur Buttora.	Do.

DIX 38-A—continued.

corrected up to 31st December 1906.

Gauge.	Length.	Estimated cost.	REMARKS.
	Miles.	Rs.	
3' 3½"	22'57	.. ...	The results of survey have not yet been received by the Railway Board. The Government of Madras consider this line to be more important than the Nidamangalam-Vedaranem railway proposed by the District Board of Tanjore. The South Indian railway are, however, opposed to its construction except as an integral part of their undertaking on the ground of its being competitive. Proposals for financing the line are awaited from the Government of Madras.
5' 6"	5½	.....	A certain amount of earthwork has been carried out by the United Provinces Government as a measure of famine relief. The survey has been completed, but the results have not yet been received.
5' 6"	5'45	.....	The survey has been completed and the results are awaited.
5' 6"	31½	28,22,765	The line will probably be constructed by the East Indian railway as part of their undertaking, and the point of junction with the loop line will probably be at Sainthia instead of at Ahmadpur.
.....	.....	.....	See "Belapur (or Lakh)—Sangamner branch."
.....	.....	.....	See "Gheria extension."
2' 6"	32'2	11,68,118	On the 5' 6" gauge the cost is estimated at Rs. 19,31,676 and for a light line Rs. 13,07,000.
3' 3½"	90	1,01,41,298	The Theinni route is considered in every way inferior to the Supkyet route.
3' 3½"	93½	1,03,54,840	
3' 3½"	46	A Karachi firm has applied for permission to form a company in England with a capital of £250,000 for financing these lines. It is proposed to take the Mirpur Khas-Jhudo line in hand at first and to raise £55,000 for its construction. The concessions asked for are a rebate from the traffic interchanged with the Jodhpur-Bikaner railway, which will construct and work the line, towards a dividend of 3½ per cent., and others usually granted to Branch line companies. The application is under consideration.
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5' 6"	70	37,41,833	These lines, as well as the Hyderabad-Badin branch, which is now open, were projected as light feeders to the North Western railway in the country lying between the Indus river and the Runn of Cutch. The Chhor-Tatta and the Mirpur Buttora-Dhindee lines proposed under the Sind Light railways scheme partially cover the alignment of these branches.
5' 6"	33	17,19,269	

Statement of railway and tramway projects

Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or not.
M.			
Mandra-Basal railway (Punjab) ...	North Western railway ...	Mandra to Basal <i>via</i> Chakwal, Bhon and Pindi Gheb.	Not surveyed ...
Mangaldai tramway (Eastern Bengal and Assam).	.....	Rangamatighat to Ghagrapara	Reconnoitred by the promoters.
Margao-Karwar railway (Bombay and Portuguese territory.)	Southern Mahratta railway. (West of India Portuguese.)	Margao to Sadasivgarh ferry, opposite Karwar.	Reconnoitred ...
Mauli-Nathdwara branch (Rajputana).	Udaipur-Chitor railway...	Mauli and Nathdwara ...	Surveyed ...
Miraj-Bijapur branch (Bombay) .	Southern Mahratta railway.	Miraj and Bijapur . . .	Not surveyed . . .
Mirpur Buttora-Dhindee light railway (Bombay).	}	}	}
Mirpur Khas-Jhudo light railway (Bombay).			
Mirpur Khas-Sangur light railway (Bombay).			
Mirzapur-Maihar Chord (United Provinces and Central India).	East Indian railway .	Mirzapur and Maihar . . .	Reconnoitred . . .
Miyagam-Sinor branch (Bombay)	Bombay, Baroda and Central India railway.	Miyagam and Sinor . . .	Surveyed . . .
Moulmein-Myawaddy railway (Burma).	Burma railways . . .	Moulmein and Myawaddy . . .	Reconnaissance sanctioned
Moulmein-Ye railway (Burma) .	Ditto . . .	Moulmein and Ye . . .	Surveyed . . .
Munsar-Ramtek branch (Central Provinces).	.....	.....	.....
Murshidabad-Azimganj link (Bengal).	Eastern Bengal State railway.	Murshidabad and Azimganj .	Surveyed . . .
Murtajapur-Pisgaon railway (Central Provinces).	Great Indian Peninsula railway.	Murtajapur and Pisgaon . .	Surveyed . . .
Muttra-Aligarh railway (United Provinces).	Bombay, Baroda and Central India railway. (Rajputana-Malwa).	Muttra and Aligarh The alternative projects are:— (1) Muttra <i>via</i> Brindaban with a new bridge near that place over the Jumna and thence direct to Aligarh. (2) Muttra <i>avoiding</i> Brindaban and utilising the existing bridge over the Jumna at Muttra and thence direct to Aligarh.	Surveyed. Do.
Muttra-Hathras link (United Provinces) (<i>New project</i>).	Bombay, Baroda and Central India railway (Rajputana-Malwa).	Muttra and Hathras . . .	See "remarks" . . .
Muzaffarpur-Mohammadpur chord (Bengal).	Bengal and North-Western railway. (Tirhoot section).	Muzaffarpur and Mohammadpur.	Under survey . . .
Muzaffarpur—Sitamarhi chord (Bengal).	Do.	Muzaffarpur and Sitamarhi .	Do.
Myingyan-Natogyi light railway (Burma) (<i>New project</i>).	Burma railways . . .	Myingyan and Natogyi . . .	Survey sanctioned .

DIX 38-A—continued.

corrected up to 31st December 1906.

Gauge.	Length.	Estimated cost.	REMARKS.
	Miles.	Rs.	
2' 6"	100	...	This line has been recommended for construction by the Government of the Punjab to open up the country north of the Salt Range. The Railway Board have, since the close of the year, sanctioned its survey by the agency of the North Western railway.
2' 6"	35	7,00,000	This line was proposed by private enterprise, but the project fell through owing to the inability of the Local Administration to offer the guarantee asked for.
Not stated apparently. 3' 3½"	36½	28,00,000	This line has been proposed to open up communication with Karwar, which is practically cut off from all intercourse with the outer world during the south-west monsoon when the coasting steamers cease running. About 30 miles of the line will be situated in Portuguese territory and the remainder in British territory.
3' 3½"	14.75	4,72,698	This line will be constructed by the Mewar Durbar who proposed it.
.....	77	.....	The Barsi Light Railway Company contemplate the construction of this line as an extension of their 2' 6" gauge railway.
.....	.....	.....	See under "Light railways in Sind."
5' 6"	140	1,55,00,000	This line was proposed by the East Indian railway. It is not considered to be of sufficient importance at present to require investigation.
2' 6"	20	5,76,032	The line has been proposed by the Baroda Durbar in whose territory it will entirely lie.
3' 3½"	80	.....
Do.	94.06	90,00,000	Preliminary report received. Detailed project and estimates are awaited.
.....	.....	.....	See under "Kamptee-Deolapar railway."
5' 6"	5.82	18,05,616	The project consists practically of a bridge over the Bhagirathi river below Azimganj and its approaches. It has since been abandoned.
2' 6"	131.42	56,03,381	The results of survey have been received since the close of the year.
5' 6"	40.80	40,54,603	The question of agency for the construction and working of this line has not yet been decided, and no decision on this point is likely to be arrived at till the Nagda-Muttra railway has been opened and its effect on trade observed.
Do.	38.25	33,53,688	
See "remarks."	...	...	Sanction has been accorded to the preparation of plans and estimates for this line on the 5' 6" gauge.
3' 3½"	31	...	
Do.	34	...	
Not stated.	19	...	

Statement of railway and tramway projects

Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or not.
M—concl'd.			
Mymensingh-Netrokona extension (Eastern Bengal and Assam.)	.....	.....	...
Mysore-Tellicherry railway (Mysore and Madras).	Southern Mahratta railway (Mysore section).	Mysore and Tellicherry . .	Surveyed.
N.			
Nadiad-Kapadvanj branch (Bombay).	Bombay, Baroda and Central India railway.	Nadiad and Kapadvanj . .	Not surveyed . .
Nagpur-Barosa branch (Central Provinces).	Bengal-Nagpur railway	Nagpur and Barosa . . .	See remarks . . .
Nagpur-Chhindwara railway (Central Provinces).	Do. . . .	Nagpur and Chhindwara . .	Not surveyed . .
Nanjangud-Erode railway (Mysore and Madras).	Southern Mahratta railway (Mysore section).	Nanjangud and Erode . .	Surveyed . . .
Nar-Nadiad loop (Bombay) . .	Bombay, Baroda and Central India railway (Pctlad-Cambay).	Nar and Nadiad . . .	Surveyed . . .
Nattore-Rampur Boalia branch (Eastern Bengal and Assam).	Eastern Bengal State railway.	Nattore and Rampur Boalia. .	Surveyed . . .
Nawadah-Madhupur (or Baidyanath)-Nalhati (Bengal).	East Indian railway ...	Nawadah and Nalhati ...	Not surveyed ...
Nerbudda Valley light railway (Central India).	.....	.....	.....
Netrokona-Langar Bazar extension (Eastern Bengal and Assam).	.....	.....	.....
Nidamangalam-Vedaraniem railway (Madras).	South Indian railway ...	Nidamangalam and Vedaraniem	Partly surveyed ...
NORTH AND SOUTH RAILWAY (CENTRAL PROVINCES, NIZAM'S HYDERABAD AND MADRAS.)			
The lines connected with the northern portion of the scheme are :—			
(i) Itarsi-Wardha (Central Provinces).	Great Indian Peninsula... railway.	Itarsi and Wardha ...	Surveyed ...
(ii) Itarsi-Nagpur :—			
Eastern alignment—Itarsi, passing near Chhindwara town and the Pench Valley colliery, to Nagpur (Central Provinces).	Ditto ...	Itarsi and Nagpur ...	Ditto ...
Western alignment—Itarsi, via Pandharna and Multai to Nagpur (Central Provinces).	Ditto ...	Ditto ...	Ditto ...

DIX 38-A—contd.

corrected up to 31st December 1906.

Gauge.	Length.	Estimated cost.	REMARKS.
	Miles.	Rs.	
...	...	...	See under "Dacca-Mymensingh railway extensions".
2' 6"	144'69	81,00,000	The principal objects of this line are to open up parts of the Mysore plateau and the Malabar district and to give the coffee and other products of Coorg access to Mysore and to the seaport of Tellicherry.
5' 6"	28	8,73,360	The District Board of Kaira have under consideration the question of financing this line.
2' 6"	47'04	23,34,145	The detailed project is based on the surveys carried out by the Great Indian Peninsula railway on 5' 6" gauge in connection with the Nagpur-Itarsi line. This project covers part of the proposed Nagpur-Chhindwara railway.
2' 6"	80	.....	The early construction of this line was urged by the Hon'ble the Chief Commissioner, Central Provinces, in order to develop trade in manganese ore and to enable Nagpur to obtain cheap coal for its mills, etc., from the Pench Valley deposits.
3' 3½"	120'70	1,23,03,700	This line will link up the Southern Mahratta and the South Indian railway systems. A length of 33'70 miles, which lies in Mysore territory and is estimated to cost Rs. 20,81,764, has been sanctioned for construction by, and at the cost of, the Mysore State, but the Durbar do not propose to construct this section until the British section is put in hand.
5' 6"	20'25	11,56,713	This line was proposed by the Baroda Durbar in whose territory it will mostly lie. The Durbar has since expressed a desire to construct it on the 2' 6" gauge instead of on the 5' 6" gauge and had the Nar-Piej section, 17 miles, surveyed on the 2' 6" gauge by the agency of the Bombay, Baroda and Central India railway.
3' 3½"	24'43	11,14,875	This line has been deferred pending the investigation of the crossing of the Ganges at some point between Sara and Godagari.
*	...	...	This line will probably be constructed by the East Indian railway.
...	...	...	See "Barwahn-Bodeli light railway."
.....	.....	.....	See under "Dacca-Mymensingh railway extensions."
3' 3½"	...	...	This line comprises the Nidamangalam—Mannargudi section of the Kumbakonam-Mannargudi line. It has been proposed by the District Board of Tanjore who urge the construction of the Tirutaraipundi-Vedaraniem section of it in preference to the Kumbakonam-Mannargudi line which the Madras Government consider to be of primary importance. The South Indian railway was authorized to survey the Tirutaraipundi-Vedaraniem section, 20'20 miles, on behalf of the Tanjore District Board in order that the rival claims of the two lines might be carefully investigated. The survey has since been completed, but the results have not yet been received by the Railway Board.
* 5' 6"	207'35	2,31,94,256	Surveys were carried out by the Great Indian Peninsula railway in 1905. Two alternative routes to Warangal have since been surveyed but the detailed project has not yet been received. A chord line from Bori (or Borkhedi) on the Nagpur branch to Hinganghat on the Wardha branch, 27 miles, is under survey. Pending receipt of the results of these surveys, the consideration of the projects submitted has been deferred.
5' 6"	173'94	2,35,55,035	
5' 6"	179'72	2,02,43,748	

Statement of railway and tramway projects

Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or not.
N—concl'd.			
North and South railway—concl'd.			
(iii) Bellarpur-Warangal (or Kazipet)—			
Eastern route—Bellarpur <i>vid</i> Ahiri and Sironcha to Warangal with a branch to Kazipet (Central Provinces and Nizam's Hyderabad).	Great Indian Peninsula railway.	Bellarpur and Warangal ...	Surveyed ...
Western route—Bellarpur <i>vid</i> Ahiri and Sironcha to Warangal with a branch to Kazipet (Central Provinces and Nizam's Hyderabad).	Ditto ...	Ditto ...	Ditto ...
Direct route—Bellarpur to Kazipet with a branch to Warangal (Central Provinces and Nizam's Hyderabad).	Ditto ...	Ditto ...	Ditto ...
<i>The proposals connected with the southern portion of the scheme are:—</i>			
(i) Ramesvaram to Ramnad (Madras).	South Indian railway ...	Ramesvaram and Ramnad ...	Not surveyed ...
(ii) Ramnad, <i>vid</i> Trichinopoly, to a point between Tirukkoyilur and Penruti (Madras).	Ditto ...	Ramnad and a point between Tirukkoyilur and Penruti.	Ditto ...
(iii) From the terminus of (ii) to Arkonam, (Madras).	Ditto ...	Terminus of (ii) and Arkonam ...	Ditto ...
(iv) Renigunta-Gudur (Madras)	Ditto ...	Renigunta and Gudur ...	.....
<i>Alternatives to (iii) and (iv).</i>			
Villupuram-Madras (Madras).	Ditto ...	Villupuram and Madras ...	.....
Chingleput-Arkonam (Madras).	Ditto ...	Chingleput and Arkonam ...	.....
Villupuram to the terminus of (ii) (Madras).	Ditto ...	Villupuram and the terminus of (ii).	.....
Northern India and Ceylon connection.	.....	.....	.....
P.			
Paddapenki-Parvatipur branch (Madras).	.....	.....	.....
Palghat-Palni railway (Madras) .	.....	.....	.....
Palni-Satyamangalam railway (Madras).	.....	Palni to Satyamangalam with a branch from— Satyamangalam to Mettupalaiyam.	Surveyed ... Do. ...
Panchkura-Luff Point (Bengal) .	Bengal-Nagpur railway .	Panchkura and Luff Point ...	Not surveyed * ...

DIX 38-A—contd.*corrected up to 31st December 1906.*

Gauge.	Length.	Estimated cost.	REMARKS.
	Miles.	Rs.	
5' 6"	190'73	2,32,30,222	Surveys were carried out by the Great Indian (Peninsula) railway in 1905. Two alternative routes to Warangal have since been surveyed but the detailed project has not yet been received. A chord line from Bori (or Borkhedi) on the Nagpur branch to Hinganghat on the Wardha branch, 27 miles, is under survey. Pending receipt of the results of these surveys, the consideration of the projects submitted has been deferred.
5' 6"	184'35	1,92,92,845*	
5' 6"	148'62	1,44,36,200*	
5' 6"	43	.....	The proposal contemplates the laying of a mixed gauge between Ramnad and Mandapam, 23 miles, and the construction of 20 miles of new line.
5' 6"	195	.....	New construction.
5' 6"	80	.....	Ditto.
5' 6"	51½	.....	Conversion from the existing 3' 3½" to 5' 6" gauge.
5' 6"	101½	.....	Ditto Ditto.
5' 6"	39	.....	Ditto ditto.
Mixed 3' 3½" and 5' 6".	.....	.....	Laying of a third rail. The projects relating to the southern portion of the scheme were recommended by a Railway Commission which assembled in Madras in February 1903 with a view to effecting a through standard (5' 6") gauge connection between India and Ceylon.
.....	.....	.....	See remarks under "North and South railway".
.....	.....	.....	See "Dusi-Salur light railway".
.....	.....	.....	See "Dindigul-Palghat railway" of which it forms a part.
3' 3½"	84'36	84,33,040	
3' 3½"	17'53	25,03,225	
5' 6"	25	.....	This project was proposed by the Bengal-Nagpur Railway Company in 1900, coupled with proposals for establishing an export coal depôt at Luff Point. The latter question was investigated in 1903 by a Commission, whose conclusions were that a coal depôt at Luff Point would be of little use to the industry as a whole; that, though practicable, it would probably be costly; that it is not at present desirable to establish one at Luff Point; and that if established it should be in the hands of the Port Commissioners of Calcutta. The Government of India decided that the Port Trust of Calcutta should have the first refusal of constructing any such depôts or jetties at Luff Point or in its neighbourhood, and that, should that body decline to undertake the work, Government would be prepared to consider definite proposals from any substantial private firm or company for undertaking the combined scheme at its own risk and responsibility.

* Excluding rolling stock.

APPEN

Statement of railway and tramway projects

Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or not.
<i>P—concl'd.</i>			
Pandharpur-Miraj extension (Bombay).	Barsi Light railway ...	Pandharpur and Miraj* ...	Survey sanctioned ...
Parlakimedi-Baruva light railway (Madras).	.....	.....	.....
Pathankot-Baijnath (or Palampur) (Punjab).	.....	.....	.....
Pathar Kandi Bazar-Magura Cherra tramway (Eastern Bengal and Assam).	.....	.....	.....
Patiala-Jakhal railway (Punjab) ...	North Western railway (Rajpura-Bhatinda).	Patiala and Jakhal ...	Surveyed ...
Patiala-Jakhal railway extension (Punjab).	North Western railway (Southern Punjab).	Jakhal <i>via</i> Hissar, Loharu and Kanaud to Narnaul.	Not surveyed ...
Patti-Lodhran railway (Punjab) .	North Western railway (Amritsar-Patti).	Patti to Lodhran <i>via</i> Kasur, Hajra, Dipalpur, Haveli and Pakpatan.	Under survey . .
Pegu-Syriam railway (Burma) ...	Burma railways ...	Pegu and Syriam ...	Surveyed ...
Pertabganj-Birpur-Ghoraghat railway (Bengal).	Bengal and North-Western railway (Tirhoot section).	Pertabganj and Ghoraghat ...	Surveyed ...
Phirangipuram-Gurzala branch (Madras).	Southern Mahratta railway.	Phirangipuram and Gurzala ...	Surveyed ...
Phulbari-Sumjhia branch (Eastern Bengal and Assam).	Eastern Bengal State railway.	Phulbari and Sumjhia ...	Surveyed ...
Pilibhit-Barmdeo branch (United Provinces).	Rohilkund and Kumaon railway (Lucknow-Bareilly).	Pilibhit and Barmdeo ...	Surveyed ...
Pilibhit-Shahjahanpur railway (United Provinces).	Rohilkund and Kumaon railway (Lucknow-Bareilly).	Pilibhit and Shahjahanpur ...	Under survey ...
Podanur-Palni railway (Madras).	Madras railway ...	Podanur and Palni ...	Surveyed ...
Pokhrayan-Auriya branch (United Provinces).	Great Indian Peninsula railway.	Pokhrayan and Auriya ...	Reconnoitred ...
Prome-Magwe-Meiktila extension (Burma).	Burma railways ...	Prome and Meiktila ...	Not surveyed ...
Prome-Zadalin railway (Burma).	...	.....	...
Puri-Astrang branch (Bengal) ...	Bengal-Nagpur railway.	Puri and Astrang ...	Not surveyed ...
Pyinmana-Magwe railway (Burma)	Burma railways ...	Pyiwin to Kyanzu ...	Surveyed ...
		Kyanzu to Magwe ...	Not surveyed ...
<i>R.</i>			
Raichur-Wondalli railway (Hyderabad, Nizam's).	Great Indian Peninsula railway.	Raichur and Wondalli ...	Surveyed by the promoters.

DIX 38-A—continued.

corrected up to 31st December 1906.

Gauge.	Length.	Estimated cost.	REMARKS.
	Miles.	Rs.	
2' 6"	77	.....	The survey is being carried out by the Barsi Light railway from Imperial funds.
.....	.....	.....	See under " Ganjam District light railways ".
.....	.....	...	See " Kangra Valley railway ".
.....	.....	.....	See under " Sylhet District tramways ".
5' 6"	54'35	.....	This line has been proposed by the Patiala Durbar and would form a chord between the Rajpura-Bhatinda and the Southern Punjab railways. The preparation, at the cost of the Durbar, of alternative projects on the 3' 3½" and 5' 6" gauges has been sanctioned. The survey has been completed and the detailed projects are awaited.
.....	131	.....	This line has been proposed by the Durbars interested. The proposals are under consideration.
5' 6"	242	.....	This line will be constructed by the State as an integral part of the North Western railway. The Lodhran-Mailsi section, 39·7 miles, has been surveyed and is estimated to cost Rs. 17,94,793 on the 5' 6" gauge. It will comprise a large portion of the Changa Manga-Pakpattan project.
3' 3½"	67·68	53,30,984	The Amritsar-Patti Railway Company have applied for a concession to extend their line from Patti to Kasur. The application is under consideration.
3' 3½"	15	.....	This line has been proposed to take the place of the existing Pertabganj-Khanwaghat section, which will be abandoned. The results of survey have not been received by the Railway Board.
3' 3½"	50·64	12,59,641	
3' 3½"	13·48	4,41,745	
3' 3½"	38·75	.....	A resurvey of this line was ordered by the Home Board of the Rohilkund and Kumaon railway. This has been completed and the results are awaited. The line will be an extension of the Lucknow-Bareilly railway and will be constructed from funds to be provided by the State. It will serve the lower Kumaon and the forests on the banks of the Sarda river.
3' 3½"	56	.....	The Rohilkund and Kumaon Railway Company urged to be allowed to construct on the metre gauge a railway from Pilibhit <i>via</i> Shahjahanpur to Sitapur, but the Secretary of State has approved of the construction by the Company of the Pilibhit-Shahjahanpur section only, the remainder being superseded by the Rosa-Sitapur line to be constructed as an integral part of the Oudh and Rohilkhand railway.
5' 6"	65·24	88,04,307	This line is an alternative to the Palghat-Palni railway.
2' 0"	28	7,28,000	The line was reconnoitred in 1899 but the results have not yet been submitted.
3' 3½"	176	1,13,00,000	This line was recommended in 1895 by the Chief Commissioner of Burma as one that would tap the prosperous oil fields at Yenanchoung.
.....	.....	.....	See " Assam-Burma connection railway."
5' 6"	34	27,20,000	This line will, it is stated, have a certain protective value in famine times and, if aligned parallel to the seashore and about 6 or 8 miles away, will pass through thickly populated tracts.
3' 3½"	54·09	39,34,029	This line was proposed by the Government of Burma in 1905 with a view to providing useful work in case famine should occur in the adjoining dry zone districts.
3' 3½"	66	.....
2' 6"	43	12,53,336	This line was proposed by a syndicate to serve the Wondalli gold mines and the proposals were approved by the Secretary of State in 1900, but the scheme has not advanced. It will form a feeder to the Great Indian Peninsula and Madras railways.

Statement of railway and tramway projects

Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or not.
R—concl'd.			
Raipur-Khurda railway (Central Provinces and Bengal).	Bengal-Nagpur railway...	Raipur and Khurda ...	Partly reconnoitred ...
Rangamatighat-Ghagrapara tramway (Eastern Bengal and Assam).	.....	.....	.....
Rangya-Tezpur railway (Eastern Bengal and Assam).	Eastern Bengal State railway.	Rangya and Tezpur ...	Surveyed
Rawalpindi-Murree railway (Punjab).	North Western railway .	Rawalpindi and Murree ...	Reconnoitred by the promoter.
Rewah-Sutna railway (Central India).	...	Rewah and Sutna ...	Surveyed
Rosa-Sitapur railway (United Provinces).	Oudh and Rohilkhand railway.	Rosa and Sitapur ...	Surveyed
Rowsara-Khagaria light railway (Bengal).	Bengal and North Western railway (Tirhoot section).	Rowsara and Khagaria ...	Apparently reconnoitred by the District Engineer, Monghyr.
S.			
Saidpur-Titalia branch (Eastern Bengal and Assam).	Eastern Bengal State railway.	Saidpur and Titalia ..	Surveyed
Salem-Attur branch (Madras) ...	Madras railway ...	Salem and Attur ...	Surveyed
Salem-Porto Novo railway (Madras).	Madras railway ...	Salem and Porto Novo ...	Surveyed
Samastipur-Rowsara light railway (Bengal).	Bengal and North Western railway (Tirhoot section).	Samastipur and Rowsara ...	Not surveyed ..
Samastipur-Rowsara-Padri extension (Bengal).	Bengal and North Western railway (Tirhoot section).	Samastipur and Padri ...	Under survey ...
Sambalpur-Khurda railway (Central Provinces and Bengal).	Bengal-Nagpur railway	Sambalpur and Khurda ...	Surveyed
Santipur-Kalna extension (Bengal)	Eastern Bengal State railway.	Santipur and Kalna ...	See "Remarks " ...

DIX 38-A.—continued.

corrected up to 31st December 1906.

Gauge.	Length.	Estimated cost.	REMARKS.
	Miles.	Rs.	
5' 6"	295½	3,02,51,043	This line was proposed as an alternative to the Sambalpur-Khurda railway. The Raipur-Sonpur section, 160 miles, was reconnoitred, the remaining portion being surveyed as part of the Sambalpur-Khurda railway. The Raipur-Vizianagran railway, which is now under construction, supersedes a section of this line.
.....	.....	.....	See "Mangaldai tramway."
3' 3½"	72'34	27,19,983	This line is strongly supported by the Government of Eastern Bengal and Assam on the grounds that it would serve an important tea district in the Mangaldai sub-division and afford a powerful stimulus to the reclamation of the savannah country which is becoming gradually settled with time-expired garden coolies.
3' 3½"	40	36,88,537	This line has been proposed by private enterprise. The estimates are for an electric railway excluding interest during construction and maintenance and promotion charges. Including these charges the estimated cost is Rs. 44,78,537.
* 2' 6"	32	7,61,810	This line will connect with the East Indian railway at Sutna. It was proposed with a view to providing relief on the occurrence of scarcity in the Rewah State. The line will probably be constructed by the Durbar.
5' 6"	51'36	38,74,471	This line supersedes the Shahjahanpur-Sitapur section of the Pilibhit-Sitapur railway proposed by the Rohilkund and Kumaon Railway Company. The Secretary of State has approved of its construction as an integral part of the Oudh and Rohilkhand railway.
Not stated, probably 2' 6"	44	10,00,000	This line was proposed by the District Board of Monghyr in 1905. In conjunction with the Samastipur-Rowsara light railway proposed by the District Board of Darbhanga, it will form a chord between Samastipur and Khagaria stations on the Tirhoot State railway. The District Board have signified their intention of withdrawing their proposal in favour of the Darbhanga-Khagaria and Samastipur-Padri extensions proposed by the Bengal and North-Western railway, provided that the line is taken in hand before the end of 1908.
3' 3½"	66	29,84,000	This project has been held over until the site for the new Ganges bridge and the system of lines connected with it are finally settled.
5' 6"	36'06	17,59,555	In 1903 the Secretary of State sanctioned the construction of this line as a State railway, but the commencement of work was not authorized pending provision of funds. The District Board of Salem has since expressed a desire to construct it on the metre gauge, but no decision has yet been come to as to how the capital required for its construction is to be raised.
3' 3½"	116	69,86,000	This line also passes through Attur and therefore comprises the Salem-Attur project. It was proposed in 1887 as a famine protective line by the Government of Madras who have since put forward the Trichinopoly-Tirukkoyilur railway in substitution of it. The approximate cost on the 5' 6" gauge is estimated at Rs. 86,00,000.
Not stated, probably 2' 6".	17½	6,25,000	The District Board of Darbhanga proposed the construction of this line through the agency of a company under Bengal Tramways Act III of 1883. The Bengal and North-Western railway have since proposed an alternative line from Samastipur to Padri <i>via</i> Rowsara and the District Board have intimated their willingness to withdraw their proposal in favour of the latter line if its construction is undertaken within a reasonable time.
3' 3½"	34	...	This line has been proposed by the Bengal and North Western railway and is alternative to the Samastipur-Rowsara light railway put forward by the District Board of Darbhanga.
5' 6"	190	2,37,00,000	The Government of Bengal has urged the early construction of this line by the State on administrative and political grounds.
2' 6"	6½	...	This line will be an extension of the Ranaghat-Krishnagar branch. In 1904 orders were issued for the preparation of a detailed project for the extension and of alternative estimates for connecting the branch with the Ranaghat-Godagari railway on the 5' 6" gauge— (i) by a 2' 6" gauge line from Raghampur station to meet the 5' 6" gauge railway on the west side of the Churni bridge; (ii) by extending (i) over the bridge right up to Ranaghat along the 5' 6" gauge alignment on a 4-rail mixed gauge. The detailed project estimates are awaited.

Statement of railway and tramway projects

Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or not.
<i>S—contd.</i>			
Sara bridge (Eastern Bengal and Assam).	...	.....	...
Sara-Sirajganj-Jagannathganj railway (Eastern Bengal and Assam).	Eastern Bengal State railway.	(i) Sara to Sirajganj ... (ii) Sirajganj to Brahmaputra right bank. (iii) Brahmaputra left bank to Jagannathganj with Subarnakhali branch.	Surveyed ... Do. ... Do. ...
Saraikala-Abbottabad-Srinagar railway (North-West Frontier Province and Kashmir).	North Western railway	Saraikala to Srinagar <i>via</i> Abbottabad <i>Alternative</i> Mandra to Srinagar <i>via</i> Panjar...	Do. ... Do. ...
Satara Road-Satara City railway (Bombay).	Southern Mahratta railway.	Satara Road and Satara City ...	Surveyed ...
Sealtic-Lala Bazar tramway (Eastern Bengal and Assam).	...	.....	...
Shadipalli-Mehoo Suboo light railway (Bombay).	}	.....	...
Shadipalli-Samara light railway (Bombay).		.....	...
Shambhuganj-Gauripur branch (Eastern Bengal and Assam).		.....	...
Shibnibash-Kotchandpur-Magura branch (Bengal).	Eastern Bengal State railway.	The three alignments surveyed and estimated for are— (i) <i>via</i> Khallispur, Durgapur and Jhenida with a branch from Jhenida to Sulkopa. (ii) <i>via</i> Khallispur and Kaliganj direct to Magura with a branch from Kaliganj to Sulkopa. (iii) <i>via</i> Khallispur, Kaliganj and Jhenida with a branch from Jhenida to Sulkopa.	Surveyed ... Do. ... Do. ... Do. ... Do. ...
Shwebo-Thabeitkyin railway (Burma).	Burma railways	Shwebo and Thabeitkyin ...	Surveyed ...
Shwebo-Yeu light railway (Burma) (<i>New project</i>).	Burma railways	Shwebo and Yeu ...	Survey sanctioned ...
Sihor-Palitana branch (Kathiawar, Bombay).	Bhavnagar-Gondal-Junagad-Porbandar railway.	Sihor and Palitana ...	Surveyed ...
Silchar-Duarbund tramway (Eastern Bengal and Assam).	}	.....	...
Silchar-Tikalpur tramway (Eastern Bengal and Assam).		.....	...
Singhjani-Sherpore-Nalitabari railway (Eastern Bengal and Assam).	...	.....	...
Singia-Madaripur-Chandpur railway (Bengal and Eastern Bengal and Assam).	Eastern Bengal State railway.	Singia and Bhedarganj ...	Surveyed ...

DIX 38-A.—continued.

corrected up to 31st December 1906.

Gauge.	Length.	Estimated cost.	REMARKS.									
	Miles.	Rs.										
...	See " Ganges bridge at Godagari or Sara ".									
5' 6"	49'48	62,09,669	The estimates exclude the cost of a steam ferry across the Brahmaputra river amounting to Rs. 9,30,000.									
5' 6"	3'22	3,70,008	The project has been held over pending a decision on the question of a bridge over the Ganges at Sara.									
3' 3½"	26'05	15,38,521										
{	5' 6"	2,98,85,284	The project, as now revised, provides for a 5' 6" gauge line from Saraikala to Abbottabad worked as part of the North Western railway, and for a metre gauge line worked by electricity from Abbottabad to Srinagar, the portions within British and Kashmir territories being constructed and owned by the Government of India and the Durbar respectively.									
	3' 3½"	2,44,93,474										
	5' 6"	3,02,04,184										
	3' 3½"	2,42,66,519										
			A resurvey of the Saraikala-Abbottabad section, 48 miles, has been ordered with instructions to prepare comparative estimates on the 5' 6" gauge with ruling grades of 1 in 70 and 1 in 40 respectively.									
3' 3½"	10	...	The project estimates are awaited.									
...	See under " Cachar District tramways ".									
...	See under " Light railways in Sind ".									
...	See under " Dacca-Mymensingh railway extensions ".									
5' 6"	51'75	49,94,494	This branch was proposed on the 2' 6" gauge by a Calcutta firm in 1896 and is alternative to the Bongong-Kotchandpur line put forward by the late Bengal Central railway on the 5' 6" gauge. The Government of India expressed a preference for the former line and decided that it should be constructed on the same gauge (5' 6") as the parent line. Of the alignments examined, the Manager, Eastern Bengal State railway, recommends No. (iii), the branch to Su'kopa being postponed until the trend of traffic on the Kumar river north of Magura has been definitely ascertained.									
5' 6"	12'00											
5' 6"	48'00	53,07,874										
5' 6"	19'75											
5' 6"	55	52,49,115										
5' 6"	12											
3' 3½"	30'05	14,42,845	This line was proposed to tap the Kabwet collieries and to open up the Ruby Mines district. If it stops at Letkobin, in which case the collieries will be served equally well, the length would be 22'75 miles and cost Rs. 9,93,840.									
Not stated	22	...	This line has been designed to open up the country to be irrigated by the Shewbo and Yeu canals.									
3' 3½"	17	5,20,791	This line was proposed by the Palitana Durbar, by whom it will probably be constructed. It would facilitate pilgrimages to the sacred shrines of Palitana to which pilgrims flock twice a year and would also form part of the direct route to the port of Shiah Bet on the south coast of Kathiawar.									
...	See " Cachar District tramways ".									
...	See under " Dacca-Mymensingh railway extensions ".									
5' 6"	82'15	1,92,65,833	The cost by sections is as follows—									
			<table><tr><td></td><td>Miles.</td><td>Cost.</td></tr><tr><td>Singia to Madaripur</td><td>63'34</td><td>1,23,46,885</td></tr><tr><td>Madaripur to Bhedarganj</td><td>18'81</td><td>69,18,948</td></tr></table>		Miles.	Cost.	Singia to Madaripur	63'34	1,23,46,885	Madaripur to Bhedarganj	18'81	69,18,948
	Miles.	Cost.										
Singia to Madaripur	63'34	1,23,46,885										
Madaripur to Bhedarganj	18'81	69,18,948										
			The Madaripur-Bhedarganj section is considered impracticable on the grounds of cost.									

Statement of railway and tramway projects

Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or not.		
S—concl'd.					
Sirajganj-Ullapara railway (Eastern Bengal and Assam).	Eastern Bengal State railway.	Girajganj and Ullapara	...	Surveyed by the promoters	
Sonaripur-Ramnagar ghat extension (United Provinces).	...	.....	...
Sonepat-Saharanpur branch (Punjab and United Provinces).	East Indian railway (Delhi-Umballa-Kalka).	Sonepat and Saharanpur	...	Not surveyed	
Sointilla-Sonpur branch (Bengal)	Bengal-Nagpur railway	Sointilla and Sonpur	...	Surveyed	
Southern Shan States railway (Burma).	Burma railways	Nyaungyan and Sang Hai	...	Surveyed	
•					
Sri Madhopur-Borawar Chord (Rajputana).	Bombay, Baroda and Central India railway (Rajputana-Malwa).	Sri Madhopur and Borawar	...	Not surveyed	
Sir Madhopur-Sikar branch (Rajputana).	Bombay, Baroda and Central India railway (Rajputana-Malwa).	Sri Madhopur and Sikar	...	Surveyed	
Srimangal-Manumukh tramway (Eastern Bengal and Assam).	}	}	.....	...
Sutang-Madna tramway (Eastern Bengal and Assam).			.....	...
Sylhet District tramways—					
Sutang-Madna tramway (Eastern Bengal and Assam).			Sutang and Madna	...	Reconnoitred by the promoters.
Srimangal-Manumukh tramway (Eastern Bengal and Assam).			Srimangal and Manumukh	...	Ditto Ditto
Kalaura-Chhatak tramway (Eastern Bengal and Assam).	Assam-Bengal railway.	}	Kalaura and Chhatak via Sylhet	Ditto Ditto	
Karimganj-Chandi Khira tramway (Eastern Bengal and Assam).			Karimganj and Chandi Khira with a branch from Pathar Kandi-Bazar to Magura Cherra.	Ditto Ditto	
T					
Tando Muhammed Khan-Mirpur Buttor branch (Bombay).	...	.....	...
Taragupet (Bangalore)-Chikballapur light railway (Mysore).	...	.....	...
Taungup branch (Burma)	...	.....	...
Tinnevely-Tiruchendur railway (Madras).	South Indian railway	Tinnevely and Tiruchendur	...	Surveyed	
Trichinopoly-Thondi branch (Madras).	South Indian railway	Trichinopoly and Thondi	...	Not surveyed	

DIX 38-A.—continued.

* corrected up to 31st December 1906.

Gauge.	Length.	Estimated cost.	REMARKS.
	Miles.	Rs.	
2' 6"	18	14,00,000	This line has been proposed for construction by private enterprise, in the interests of jute and other traffic, with the help of a guarantee from the District Board of Pabna. Further proposals are awaited from the promoters.
...	...	...	See "Dudhwa branch extension to Ramnagar ghat".
5' 6"	60	48,00,000	
5' 6"	48.24	30,62,444	This branch was projected to connect at Sonpur the Raipur-Vizianagaram railway with the Sambalpur-Khurda line.
2' 6"	112.2	68,57,667	This line was projected in order to afford railway communication between the wheat-growing districts in the Southern Shan States and the port of Rangoon. The Railway Board deputed an officer in 1906 to examine on the spot the project prepared for a 2' 6" gauge line and have since directed the preparation of a detailed project on the metre gauge in accordance with the report submitted by the officer.
3' 3½"	...	...	This chord has been suggested in order to reduce the through metre gauge mileage between Delhi and Karachi.
3' 3½"	30.68	8,69,413	
...	...	...	See under "Sylhet District tramways".
2' 6"	30	11,54,407	These lines were proposed in the interests of the tea industry and as feeders to the Assam-Bengal railway. The proposals fell through owing to the inability of the local administration to guarantee interest on capital at 3 per cent. per annum which the promoters had asked for.
2' 6"	22½	8,81,567	
2' 6"	53	20,04,376	The Kalaura-Chhatak project is superseded by the Kalaura-Sylhet line, which is now under construction.
2' 6"	43	12,00,000	
...	...	...	See "Lower Sind branches".
...	...	...	See "Bangalore (Taragupet)—Chikballapur light railway".
...	...	...	See under "Assam-Burma connection railway".
3' 3½"	37.60	20,52,003	This line has been proposed by the District Board of Tinnevely from whom proposals for its financing are awaited.
3' 3½"	86	37,50,000	A part of this scheme will probably be financed by the District Board of Madura.

Statement of railway and tramway projects

Name of project, and, in brackets, the province in which it is situated.	Existing railway system with which the project is connected at the initial point.	Initial and terminal points.	Whether surveyed or not.
Trichinopoly-Tirukkoyilur railway (Madras).	South Indian railway ..	Trichinopoly and Tirukkoyilur ...	Reconnoitred ...
Tumsar road-Katangi railway (Central Provinces).	Bengal-Nagpur railway...	Tumsar road to Katangi ... Sidings to serve the mines ...	Surveyed ... Ditto ...
V. Vadnagar (or Visnagar)-Vijapur extension (Bombay).	...	.....	.....
Vaigai Valley railway (Madras) .	South Indian railway ...	Ammayanayakkannur to Kotagudi with extensions :— (i) Perivakulam to Krishnama Naik's tope. (ii) Near Theni (mile 39) to Uttamapalaiyam.	} See "Remarks" ...
Visnagar (or Vadnagar)-Vijapur extension (Bombay).	Bombay, Baroda and Central India railway (Gaekwar's Mehsana).	Visnagar to Vijapur ... <i>Alternative.</i> Vadnagar to Vijapur ...	Surveyed ... Do. ...
Vizianagram-Bimlipatam branch (Madras).	Bengal-Nagpur railway	Vizianagram and Bimlipatam ...	Not surveyed ...
Y. Yerragudipad-Jammalamadugu branch (Madras).	Madras railway ...	Yerragudipad and Jammalamadugu.	Surveyed ...
Z. Zadabin-Zibingyi railway (Burma)	...	.....	.....

DIX 38-A—concluded.

corrected up to 31st December 1906.

Gauge.	Length.	Estimated cost.	REMARKS.
	Miles.	Rs.	
3' 3½"	96.75	74,43,000	This line was recommended by the Madras Government in 1899 in substitution of the Salem-Porto Novo project and was also recommended by the Railway Commission of 1903 as part of the 5' 6" gauge route connecting India and Ceylon. It will shorten the distance between Madras and districts south of Trichinopoly by 37 miles. The South Indian Railway Company have, since the close of the year, been permitted to survey this line, the survey being adapted to the requirements of the 5' 6" gauge.
5' 6"	32.89	20,40,477	This line has been projected in order to serve the manganese mines in the Central Provinces.
5' 6"	10	5,44,435	
...	...	...	See "Visnagar (or Vadnagar)-Vijapur extension".
{ 2' 6"	55	{ See "Remarks"	This line was surveyed by a syndicate who estimated an approximate outlay of Rs. 29,377 per mile. A concession was granted to the syndicate in 1901, but in 1905 they renounced it owing to their inability to raise the capital required.
2' 6"	5		
2' 6"	18		
3' 3½"	16	5,34,280	A large portion of this project is covered by the Ammayanayakkannur-Uttamipalaiyam line proposed by the District Board of Madura.
3' 3½"	16.92	..	This line will lie entirely within the territory of the Baroda Darbar who will construct it. Earthwork for famine relief purposes was sanctioned in 1904.
5' 6"	15	9,39,000	In 1905 a Madras firm urged the construction of this line by the State in the interests of traffic in manganese, but the scheme is not supported by the Government of Madras.
{ 2' 6"	{ 24.05	10,45,904	
5' 6"		12,46,831	
...	...	...	See "Assam-Burma connection railway".

APPENDIX 39.

Statement showing the total working expenses on the principal railways in India during the year 1906 and the ratio between coaching and goods under gross receipts, total train-mileage and gross ton-mileage.

5' 6" GAUGE LINES.

Number.	RAILWAY SYSTEM. (Vide APPENDIX 38.)			GROSS RECEIPTS.		TRAIN-MILES.		TON-MILES INCLUDING DEAD WEIGHT.	
				APPENDIX 18.		APPENDIX 18.		APPENDIX 18.	
				Item No. 21.	Item No. 89.	Item No. 22.	Item No. 90.	Item No. 73.	Item No. 109.
				Coaching.	Goods.	Coaching.	Goods.	Coaching.	Goods.
			(In lakhs.)	(In lakhs.)	(In lakhs.)	(In thousands.)	(In thousands.)	(In millions.)	(In millions.)
1 (a)	Bengal-Nagpur	...	122.22	80.61	171.24	2,435.56	3,646.40	636.03	1,687.44
	Ratio	...	...	1	2.12	1	1.50	1	2.65
2 (a) to (f)	Bombay, Baroda and Central India	...	108.63	78.96	146.26	2,296.12	1,399.16	587.19	899.17
	Ratio	...	...	1	1.30	1.64	1	1	1.53
3 (a)	Eastern Bengal State	...	53.13	51.40	83.59	1,890.44	1,422.49	475.87	592.88
	Ratio	...	...	1	1.63	1.34	1	1	1.25
4 (a) to (d)	East Indian	...	321.75	251.00	562.05	7,527.83	9,818.47	2,342.72	6,095.27
	Ratio	...	...	1	2.24	1	1.30	1	2.60
5 (a) to (f)	Great Indian Peninsula	...	320.55	190.35	442.98	7,484.77	8,216.61	1,908.85	3,575.89
	Ratio	...	...	1	2.33	1	1.10	1	1.87
6 (a) to (d)	Madras	...	127.09	79.87	127.00	2,270.79	2,793.73	555.51	1,102.94
	Ratio	...	...	1	1.60	1	1.23	1	1.99
8 (a) & (b)	Nizam's Guaranteed State	...	18.43	11.32	34.82	331.61	740.59	94.80	298.01
	Ratio	...	...	1	3.08	1	2.23	1	3.14
9 (a) to (g)	North Western State	...	355.24	212.10	458.36	8,439.13	9,837.19	1,976.37	4,441.50
	Ratio	...	...	1	2.16	1	1.16	1	2.2
10 (a) & (b)	Oudh and Rohilkhand State	...	88.53	78.59	77.27	3,193.60	1,998.51	736.37	825.28
	Ratio	...	...	1.02	1	1.59	1	1	1.12

APPENDIX 39—conold.

Statement showing the total working expenses on the principal railways in India during the year 1906 and the ratio between coaching and goods under gross receipts, total train-mileage and gross ton-mileage.

3' 3½" GAUGE LINES.

Number.	RAILWAY SYSTEM. (Vide APPENDIX 38.)			GROSS RECEIPTS.		TRAIN-MILES.		TON-MILES INCLUDING DEAD WEIGHT.	
				APPENDIX 18.		APPENDIX 18.		APPENDIX 18.	
				Item No. 21.	Item No. 89.	Item No. 22.	Item No. 90.	Item No. 73.	Item No. 109.
				Coaching.	Goods.	Coaching.	Goods.	Coaching.	Goods.
			(In lakhs.)	(In lakhs.)	(In lakhs.)	(In thousands)	(In thousands)	(In millions.)	(In millions.)
11 (a)	Assam-Bengal	...	37.92	16.96	22.41	618.76	977.19	114.46	216.81
	Ratio	...	...	1	1.32	1	1.58	1	1.89
12 (a) & (b).	Bengal and North-Western	...	63.93	64.08	78.27	2,624.79	2,363.23	495.29	626.01
	Ratio	...	...	1	1.22	1.11	1	1	1.26
14 (a) to (d).	Bhavnagar-Gondal-Junagad-Porbandar	...	10.98	11.83	9.00	372.04	236.44	59.30	49.63
	Ratio	...	...	1.31	1	1.57	1	1.20	1
15 (a)	Burma	...	98.70	71.40	82.47	2,029.06	3,088.01	412.14	669.15
	Ratio	...	...	1	1.16	1	1.52	1	1.67
3 (b) and (c).	Eastern Bengal State	...	58.32	41.26	56.80	1,335.29	1,209.64	201.16	320.72
	Ratio	...	...	1	1.38	1.03	1	1	1.59
8 (a)	Hyderabad-Godavari Valley	...	16.11	10.32	19.18	373.82	560.73	69.39	111.85
	Ratio	...	...	1	1.86	1	1.50	1	1.60
16 (a) to (e).	Jodhpur-Bikaner	...	18.66	14.66	25.12	568.89	731.89	103.90	164.20
	Ratio	...	...	1	1.71	1	1.29	1	1.58
3 (g) to (m).	Rajputana-Malwa	...	129.47	97.14	175.70	3,709.67	4,261.43	657.91	1,212.32
	Ratio	...	...	1	1.81	1	1.13	1	1.64
20 (a) & (b).	Roilkund and Kumaon	...	12.57	11.07	12.13	380.98	391.72	90.77	84.24
	Ratio	...	...	1	1.10	1	1.03	1.08	1
21 (a) to (j).	South Indian	...	81.00	79.41	62.67	2,393.50	2,274.63	412.84	479.01
	Ratio	...	...	1.27	1	1.05	1	1	1.16
22 (a) to (j).	Southern Mahratta	...	74.12	45.56	75.42	1,990.24	2,804.59	313.15	592.55
	Ratio	...	...	1	1.66	1	1.44	1	1.89

APPENDIX 40.

Memorandum by the Railway Board on the results of Indian Railway working 1906-1907 and proposals for 1907-1908, as published in the Financial Statement.

CAPITAL EXPENDITURE.

The capital expenditure during the year 1906-1907 will amount to Rs. 14,61,16,000 (£9,741,100) being nearly a crore in excess of the expenditure for the year 1905-1906.

2. The expenditure in 1905-1906 includes a sum of approximately 114½ lakhs advanced to the Delhi-Umballa-Kalka Railway Company for the construction of the Kalka-Simla railway, and adjusted against the head "48—State Railways, Construction" on purchase of the railway from the Company by Government. Excluding this special item, the increase over the expenditure in 1905-1906 will be nearly 2¼ crores.

3. For the year 1907-1908 these figures have been greatly reduced. The estimate provides for spending a sum of 13½ crores (£9,000,000), a reduction of 10 per cent. on the provision of last year.

4. Under the head of lines already open, including the provision for additional rolling stock, the amount expended in 1906-1907 will be 919¼ lakhs (£6,129,300), showing an advance of about 151 lakhs over the expenditure under the same head for the previous year. Under the same heads in 1907-1908 provision is made for 1,013¼ lakhs (£6,755,000), an increase of about 10 per cent.

5. A comparison showing capital expenditure for 1907-1908 and the previous five years is contained in the following statement:—

	Lines already open, including additional rolling stock.	LINES UNDER CONSTRUCTION.		Total.	Equivalent in sterling.
		Started in previous years.	Started in current year.		
	Lakhs.	Lakhs.	Lakhs.	Lakhs.	£
1902-1903 (actual expenditure) .	4,81.74	4,52.50	71.52	10,05.76	6,705,064
1903-1904 (" ") .	5,58.77	3,13.68	84.62	9,57.07	6,380,468
1904-1905 (" ") .	5,02.76	4,86.91	88.62	10,78.29	7,188,600
1905-1906 (" ") .	7,68.19	5,49.46	32.26	13,49.91	8,999,430
1906-1907 (latest grants) .	9,19.39	5,10.20	31.57	14,61.16	9,741,100
1907-1908 (proposed grants) .	10,13.24	3,36.76	...	13,50.00	9,000,000

6. The information showing in detail how the expenditure in 1906-1907 and 1907-1908 will be distributed is contained in statement A attached to this memorandum.

The programme for 1907-1908 as originally framed contemplated an outlay of Rs. 15 crores. Financial considerations, however, necessitated its reduction to Rs. 12 crores, for which figure it received Secretary of State's sanction. It was subsequently increased by Rs. 1½ crores and now stands at Rs. 13½ crores.

APPENDIX 40—contd.

7. The mileage of lines of all gauges open to traffic on 1st April 1906 was 28,611 and under construction 2,534; on 1st April 1907 there will be 29,571 open and 2,535 under construction. At the end of the coming year there will be 1,703 miles under construction.

RAILWAY REVENUE ACCOUNT.

8. The Railways of India, taken as a whole, have for a succession of years shown a balance to the credit of general revenues, after allowing for working expenses, interest on capital expended, charges for annuities in redemption of capital and miscellaneous railway expenditure. The following table shows the approximate figures for 1906-1907 compared with the actual results for the previous five years :—

[Figures in rupees, omitting 000.]

	Gross receipts.	Working expenses.	Interest charges, etc.	Surplus of Revenue over expenditure.	Equivalent in sterling.
	R	R	R	R	£
<i>Actuals—</i>					
1901-1902 . . .	30,33,90	14,23,85	14,83,06	1,26,99	846,600
1902-1903 . . .	30,20,08	14,74,08	15,11,66	34,34	228,900
1903-1904 . . .	32,33,63	15,56,72	15,47,86	1,29,10	860,700
1904-1905 . . .	36,03,37	16,94,32	15,93,23	3,15,82	2,105,500
1905-1906 . . .	36,89,12	*16,95,16	16,93,67	3,00,29	2,001,900
<i>Estimate—</i>					
1906-1907 . . .	39,71,89	19,14,29	17,33,96	3,23,64	2,157,800

*NOTE—The figures to end of 1904-1905 include the companies' shares of surplus profits, now shown under interest charges, etc.

Compared with the results of the previous year the figures for 1906-1907 show an improvement of Rs. 23,35,000 (£155,900). The receipts are more by Rs. 2,82,77,000 (£1,885,200), the working expenses are higher by Rs. 2,19,13,000 (£1,460,900), while interest charges, etc., have increased by Rs. 40,29,000 (£268,400).

GROSS RECEIPTS.

9. In 1905-1906 the gross receipts of railways showed a large improvement over those of the previous year consequent on the opening of new lines, development of passenger traffic on existing lines, and larger movements of food grains as a result of scarcity in Guzerat, Kathiawar, Central India and certain districts in the Madras and Bombay Presidencies. The improvement was general on all railways with the exception of the North Western railway, on which there was a falling-off of over 60 lakhs due mainly to short exports of wheat to Europe owing to the uncertainty as to the prospects of the wheat crops of 1906-1907.

10. In the current year while there has been a set-back in the earnings of the Great Indian Peninsula railway due to a falling-off in traffic in raw cotton, wheat and other grains, the earnings from other railways have continued to expand, notably under goods traffic of the East Indian railway, and in jute and grain traffic on the Eastern Bengal State railway, the latter being the result of scarcity in Eastern Bengal. The earnings of the Indian Midland railway also show a phenomenal increase due to large movements of food grains and other merchandise, while those of the North Western railway are expected to reach practically the same figures as were obtained in 1904-1905.

APPENDIX 40—contd.**11. The more important increases are :—**

					Rs.
East Indian ...	...	...	...	...	38,69,000
Eastern Bengal State ...	...	...	...	...	40,01,000
Indian Midland ...	...	...	...	...	24,22,000
North Western ...	...	...	...	...	61,88,000
The principal decrease being :—					
Great Indian Peninsula ...	...	...	...	...	19,22,000

WORKING EXPENSES.

12. The increase in working expenses during the year 1906-07 is estimated to amount to Rs. 2,19,13,000 (£1,460,900). This increase to a large extent is due to increased traffic on certain lines of which the North-Western, Eastern Bengal State and Indian Midland railways are the most prominent examples.

These three lines will have earned more than a crore and a quarter of rupees (£833,300) in excess of their earnings during the previous year, and this increase in earnings necessitates increased working expenses.

13. That working expenses would tend to increase was indicated by the Railway Board in their memorandum of last year. The reasons that were given for their opinion apply now as when written a year ago.

14. Railways in India have now to run faster trains, provide better carriages, improve the conditions under which third class passengers are carried, introduce a more elaborate system of signalling, and generally conduct their business under more up-to-date methods than were in use in the past.

15. Some of these improvements will lead to increased revenue. Some will not, but have to be provided to meet the public demands.

16. The cost of many of these improvements being in the nature of renewals has to fall to a considerable extent on revenue.

17. During the period this raising of the standard is being carried out working expenses must rise, though in the end, under some items, more economical working should be secured.

18. To enable railways to carry the heavy traffic offering the permanent-way has to be improved and girders strengthened. Most lines now when making branches wish to use their light main line rails in these branches and renew the main line with heavier rails.

19. This is a sound business arrangement, but carrying out the policy indicated means that revenue has to renew before the rail itself is nearly worn out. The result is increased debits to revenue for a time, causing increased working expenses. The Board hope that a practical solution may be found to meet this difficulty, so that working expenses may be steadied and not liable to unnecessary fluctuations.

NEW LINES TO BE CONSTRUCTED.

20. Owing to the reduction in the programme, the heavy demands on account of open lines, and the large mileage of lines at present under construction, no expenditure on new lines is proposed during the year 1907-08.

OPEN LINE REQUIREMENTS.

21. The total amount allotted during 1907-1908 to open lines, *viz.*, 10,18½ lakhs (£6,755,000) out of a total for the year of 13,50 lakhs (£9,000,000), has been divided between general open line requirements and additional rolling-stock requirements approximately as follows :—

					Lakhs.
					Rs.
1907-1908	{ Open line requirements	...	...	...	445½
	{ Rolling-stock	...	...	...	568

APPENDIX 40—contd.

This shows a decrease of 64 lakhs under open line requirements and an increase of 186 lakhs under rolling-stock, in comparison with the provision made under these heads in 1906-1907, the figures for which were as follows :—

				Lakhs.
1906-1907	{ Open line requirements	...	...	509
	{ Rolling-stock	...	...	382

ROLLING-STOCK.

22. In their memorandum on the Budget last year, the Railway Board definitely stated that the then standard of equipment of Indian Railways in the matter of rolling-stock was below the requirements. Acting on this opinion they made the very large provision of 382 lakhs, to be spent for rolling-stock during the year 1906-1907, and this money has all been spent. The sum of 382 lakhs represents in sterling about $2\frac{1}{2}$ million pounds and was $\frac{1}{4}$ of a million pounds sterling more than the allotment provided for 1905-1906.

23. For the ensuing year 1907-1908, they have made a provision of 568 lakhs or about $3\frac{3}{4}$ million sterling for rolling-stock, which provision has met in full the demands of all railways for grants for rolling-stock for that year.

This increased provision of rolling-stock, coupled as it is with the necessity for providing additional sums for open line works, to enable the increased stock to be worked efficiently, has exhausted the funds at the Board's disposal, with the result that no new lines can be put in hand, until next year at the earliest.

24. The Railway Board are as fully aware, as the public are, of the urgent necessity for more rolling-stock, and have consistently done as much as they were able, with the funds placed at their disposal.

COMMUNICATION BETWEEN PASSENGERS AND GUARD OF A TRAIN.

25. The provision of an effective means of communication between passengers and the guard being a matter that seriously affects the safety of the travelling public, orders were issued by the Railway Board for the adoption on all railways in India of the type of communication now in general use in England. The North Western, Oudh and Rohilkund and Eastern Bengal State railways were instructed to at once provide this means of communication on new and rebuilt stock, and to fit the communication to the existing stock of all classes as rapidly as possible. The work of fitting the existing carriages of companies' railways is, with certain exceptions, required to be completed within two years from the date of the order.

GENERAL.

26. In order to encourage imports into tracts suffering from fodder famine the administration of the North Western railway was instructed to help the movement of *ghusa* from the Punjab, and specially from the canal colonies by quoting low rates. Rates were accordingly reduced by them, and the Oudh and Rohilkund, East Indian, Bombay, Baroda and Central India, Jodhpur-Bikaner and Gwalior Light railways followed suit. These reductions resulted in great benefit to the famine-stricken tracts.

27. Attention is invited to statements B and C attached to this memorandum which contain information of interest.

APPENDIX 10—contd.

STATEMENT A.

Statement of anticipated capital expenditure on railways, open and under construction, for the year 1907-1908.

(Figures in lakhs and decimals of lakhs.)

No.	RAILWAY.	Grants allotted for 1906-1907.	Distribution grants during 1907-1908.
A.—OPEN LINES.			
I. (i)—STATE, BY STATE AGENCY.			
		R	R
1	Eastern Bengal— Main line	} 58.13	91.70
2	Murshidabad Branch		
3	Kaunia-Bonarpara		
4	Jodhpur-Hyderabad (British section)	0.14	—0.18
5	North Western— Main line	184.16	159.27
6	Jech-Doab (Southern section)	7.09	1.18
7	Kalka-Simla	45.94	5.07
8	Rohri-Samasata, doubling	39.34	13.65
9	Shahdara-Sangla	8.01	2.65
10	Oudh and Rohilkhand— Main line	26.04	32.08
11	Allahabad-Jaunpur	4.50	1.66
12	Warora Colliery	—1.68	...
13	Reserve . . . . .	...	163.42
Total Open lines, State, by State Agency .		374.44	470.59
1. (ii)—STATE, BY AGENCY OF COMPANIES.			
14	Assam-Bengal	25.15	25.04
15	Bengal and North-Western— Tirhoot	} 22.25	{ 18.96
16	Sakri-Jainagar		
17	Bombay, Baroda and Central India— Main line	15.39	15.03
18	Palanpur-Deesa	0.02	...
19	Rajputana-Malwa	35.41	27.23
20	Rewari-Phulera	3.60	0.24
21	East Indian— Main line	160.10	102.45
22	Agra Junction-Belinganj	10.00	8.01
23	Great Indian Peninsula— Main line	49.54	94.18
24	Agra-Delhi chord	4.64	2.25
25	Bhopal-Itarsi (British section)	0.91	1.70
26	Madras— Nilgiri	0.53	1.20
27	North-East line	6.80	14.52
28	Nizam's Guaranteed State— Bezwada extension	0.03	0.03
Carried over .		334.37	805.40

APPENDIX 40—contd.

Capital Expenditure on Railways, 1907-1908—contd.

(Figures in lakhs and decimals of lakhs.)

No.	RAILWAY.	Grants allotted for 1906-07.	Distribution of grants during 1907-08.
		Rs.	Rs.
	Brought forward	334.37	305.40
	A.—OPEN LINES—concl'd.		
	I. (ii)—STATE, BY AGENCY OF COMPANIES—concl'd.		
	South Indian—		
29	Main line	27.00	28.25
30	Travancore branch (Native State section)	0.03	0.20
31	„ „ (British section)	0.20	0.20
	Southern Mahratta—		
32	Guntakal-Mysore Frontier	0.05	0.10
	Total Open Lines, State, by Agency of Companies	361.65	334.15
	II.—FROM CAPITAL OF OLD GUARANTEED COMPANIES.		
	Madras—		
33	Main line	22.02	26.70
34	Calicut-Azhikal	12	0.40
35	Bombay, Baroda and Central India	11	...
	Total Open Lines, Old Guaranteed Companies	23.15	27.10
	III.—FROM CAPITAL OF COMPANIES OTHER THAN OLD GUARANTEED COMPANIES.		
	Bengal-Nagpur—		
36	Main line	89.91	9.71
37	Midnapur-Jherriah		90.18
38	Satpura (Jubbulpur-Gondia)		
39	Sini-Midnapur-Cuttack-Calcutta		
	Burma—		
40	Main line.	45.02	42.60
	Great Indian Peninsula—		
41	Indian Midland	12.44	24.91
	Rohilkund and Kumaon—		
42	Lucknow-Bareilly	2.18	4.55
	Southern Mahratta—		
43	Main line.	7.74	9.15
44	Mysore Section.	2.82	...
	Total Open Lines, other Companies	100.11	181.10
	IV.—FROM CAPITAL OF BRANCH LINE COMPANIES WITH FIRM GUARANTEE.		
45	Hardwar-Dehra	0.04	0.30
	Total Open Lines, Branch Line Companies	0.04	0.30

APPENDIX 40—contd.

Capital Expenditure on Railways, 1907-1908—contd.

(Figures in lakhs and decimals of lakhs.)

No.	RAILWAY.	Length.	Amount of estimate or approximate cost.	Outlay to end of 1908-1909.	Grants allotted during 1908-1909.	Distribution of grants during 1907-1909.
		Milos.	Rs.	Rs.	Rs.	Rs.
B.—CONSTRUCTION OF LINES.						
I. (i)—STATE, BY STATE AGENCY.						
<i>Lines in Progress.</i>						
46	Coonoor-Ootacamund	12	24.40	9.07	6.58	4.50
47	Eastern Bengal— Forbesganj-Nepal Frontier	6.5	2.22	0.65	1.07	0.17
48	Golukganj-Gauhati	151	93.26	54.81	29.40	20.02
49	Katihar-Godagari	106	104.86	38.60	35.50	18.00
50	Nagda-Mutta— Main line	344	298.11	82.39	137.00	67.00
51	Baran-Kotah	40	37.59	1.07	19.00	13.00
52	North-Western— Khushalgarh-Kohat conversion and Indus Bridge	34	31.92	11.16	11.19	5.32
53	Kohat-Thal conversion	57	30.32	}	4.12	2.00
54	Thal-Parachinar	59.6	85.22			
55	Lodhran-Khanewal	56	45.15	...	7.80	15.72
56	Loi-Shilman	38	100.00	8.70	21.79	6.00
57	Shorkot Road-Chichoki	131	81.34	...	4.45	17.28
58	Quetta-Nushki	83	90.06	85.12	2.46	...
TOTAL		...	10,24.45	289.57	280.66	169.01
I. (ii)—STATE, BY AGENCY OF COMPANIES.						
<i>Lines in Progress.</i>						
59	Assam Bengal— Akhaura-Bhairab Bazar	19	14.30	1.79	1.84	4.05
60	Kalaure-Khoosara	16	7.80	...	0.29	4.09
61	Bengal and North-Western— Tirhoot extensions	209	117.43	92.96	23.50	10.38
62	Burma— Dagu Loop	66	40.05	...	52.82	9.00
63	Henzada-Kyangin	66	54.59	18.64		3.45
64	Pegu-Moulmein	122	112.88	65.65		21.05
65	East Indian— Bhagalpur-Bausi	31	23.31	1.87	3.00	37.73
66	Gya-Hariharpur	130	144.69	192.16	15.00	
67	Hariharpur-Barakar	48	74.54		6.00	
68	Hooghly-Katwa	65	58.46	1.45	5.00	
69	Khurja-Hapur	39	25.98	13.19	14.00	
70	Katwa-Barharwa	103	86.87	...	0.70	
71	Ondal-Sainthia	45	43.55	37.15	6.20	
72	Great Indian Peninsula— Harbour Branch	8	45.61	6.98	8.67	9.77
73	Warora-Bellarpur	38	81.94	16.07	14.13	1.50
Carried over		...	881.50	447.91	151.15	101.02

APPENDIX 40—contd.

Capital Expenditure on railways, 1907-1908—contd.

(Figures in lakhs and decimals of lakhs.)

No.	Railway.	Length.	Amount of estimate or approximate cost.	Outlay to end of 1906-1907.	Grants allotted during 1906-1907.	Distribution of grants during 1907-1908.
		Milos.	Rs.	Rs.	Rs.	Rs.
	Brought forward		881.50	447.91	151.15	101.02
	B.—CONSTRUCTION OF LINES—concl'd.					
	I. (ii)—STATE, BY AGENCY OF COMPANIES—concl'd.					
	<i>Lines in Progress—concl'd.</i>					
	Madras—					
74	Azhikal-Mangalore	77	129.05	100.21	20.30	3.49
	Southern Mahratta—					
75	Dhone-Kurnool (section of Hyderabad-Guntakal, No. 58)	32	11.32	...	1.00	4.00
	South Indian—					
76	Rameswaram Extension	12	35.19	4.90	.91	...
	TOTAL	...	10,57.06	559.02	173.36	108.51
	II.—FROM CAPITAL OF OLD GUARANTEED COMPANIES.	...	...	...	...	...
	III.—FROM CAPITAL OF COMPANIES OTHER THAN OLD GUARANTEED COMPANIES.					
	<i>Lines in Progress.</i>					
	Bengal-Nagpur—					
77	Gondia-Chanda	223	109.39	3.33	41.61	25.50
78	Kampti-Ramtek	17	7.42	...	4.37	1.74
79	Nainpur-Mandla	32	11.55	...	1.17	5.00
80	Pench Valley	29	16.53	8.93	2.30	0.50
81	Purulia-Ranchi	72	39.83	2.66	21.43	10.50
82	Raipur-Vizianagram	311	250.42	...	7.37	10.00
	TOTAL	...	435.14	14.92	78.25	33.24
	IV.—FROM CAPITAL OF BRANCH LINE COMPANIES WITH FIRM GUARANTEE.					
	V.—FROM CAPITAL OF LOCAL BOARDS.					
	<i>Lines in Progress.</i>					
83	Bozwada-Masulipatam	50	22.93	4.00	9.50	6.00
	Total	...	...	...	14,61.10	13,50.00

APPENDIX 40—contd.

Capital Expenditure on railways, 1907-1908—concl'd.

(Figures in lakhs and decimals of lakhs.)

No.	Railway.	Distribution of grants for 1907-1908.	
	ABSTRACT BY OPEN LINES AND CONSTRUCTION.	Rs.	Rs.
	A.—CAPITAL FOR OPEN LINES.		
	I. (i) State, by State agency	470.59	
	I. (ii) State, by agency of Companies	334.15	
	II. Old Guaranteed Companies	27.10	
	III. Other Companies	181.10	
	IV. Branch Line Companies	0.30	
	TOTAL OPEN LINES		10,13.24
	B.—CAPITAL FOR LINES IN PROGRESS AND NEW LINES.		
	I. (i) State, by State Agency	169.01	
	I. (ii) State, by agency of Companies	108.51	
	II. Old Guaranteed Companies . . . . .	...
	III. Other Companies	53.24	
	IV. Branch Line Companies . . . . .	...
	V. Local Boards	6.00	
	TOTAL LINES IN PROGRESS AND NEW LINES		336.76
	GRAND TOTAL		13,50.00
	ABSTRACT SHOWING DISTRIBUTION BY FUNDS.		
I.—From Imperial Funds.	(i) State, by State agency	470.59	
	(a) Open Lines	470.59	
	(b) Construction	169.01	
	Total (i)		639.60
	(ii) State, by agency of Companies	334.15	
	(a) Open Lines	334.15	
	(b) Construction	108.51	
	Total (ii)		442.66
	TOTAL I		10,82.26
II.—From Capital of old Guaranteed Companies	(a) Open Lines	27.10	
	(b) Construction . . . . .	...
	TOTAL II		27.10
III.—From Capital of Companies other than old Guaranteed Companies.	(a) Open Lines	181.10	
	(b) Construction	53.24	
	TOTAL III		234.34
IV.—From Capital of Branch Line Companies with firm Guarantee.	(a) Open Lines	0.30	
	(b) Construction . . . . .	...
	TOTAL IV		0.30
V.—From Capital of Local Boards	(a) Open Lines . . . . .	...
	(b) Construction	6.00	
	TOTAL V		6.00
TOTAL I TO V	(a) Open Lines	10,13.24	
	(b) Construction	336.76	
	GRAND TOTAL	18,50.00	18,50.00

APPENDIX 40—contd.

STATEMENT B.

Statement showing proposed lines which are under negotiation for construction by private Companies.

No.	NAME OF RAILWAY.	Length.	Estimated cost.
	<i>Bombay—</i>	Miles.	Rs.
1	Dholka-Dhandhuka-Ranpur . . .	58	Not stated.
2	Idar Road to Brahmakhed . . .	32	Do.
3	Mirpur Khas-Jhudo . . .	46	(a)
	<i>Bombay and Hyderabad (Nizam's)—</i>		
4	Tadwale to Latur . . .	37	Not stated.
	<i>Eastern Bengal and Assam—</i>		
5	Mymensingh via Netrokona to Bara-Ari, with branch from Shambhuganj to Gauripur . . .	36	22,16,000
6	Singhjani via Sherpur to Nalitambari . . .	25	12,39,000
7	Sirajganj-Ullapara . . .	18	11,00,000
	<i>Madras—</i>		
8	Tinnevely-Tiruchendur . . .	38	20,52,000
	<i>Punjab—</i>		
9	Rawalpindi-Murree, with extensions to Kuldana and Gharial . . .	40	36,89,000
	<i>Punjab and Rajputana—</i>		
10	Borawar-Hissar . . .	180	33,07,790

(a) £55,000 (or Rs. 8,25,000 at Rs. 15=£1) is proposed to be raised for the construction of this line.

APPENDIX 40—contd.

STATEMENT C.

Memorandum on the Construction of Railways.

Open lines on 1st April 1906.

	Miles.	Miles.
(i) Eastern Bengal	497.95	4,931.85
North Western	(a) 8,208.85	
Oudh and Rohilkhand	(b) 1,166.05	
(ii) Agra-Delhi Chord (c)	125.81	
Bengal-Nagpur	1,889.76	
Beswada Extension (d)	20.84	
Bhopal-Itarsi (British section) (e)	13.11	
Bombay, Baroda and Central India	(e) 504.35	7,383.02
East Indian	1,990.79	
Godhra-Rutlam-Nagda (f)	141.14	
Great Indian Peninsula	1,561.63	
Indian Midland (c)	809.66	
Madras (North-East line) (g)	(h) 497.19	
(iii) Madras	...	904.01
(iv) Hardwar-Dehra (i)	...	32.04
(v) South Behar (j)	78.76	
(vi) Southern Punjab (k)	425.33	
Southern Punjab (Ludhiana) Extension (k)	164.50	814.07
Tapti Valley (f)	155.48	
(vii) A. Delhi-Umballa-Kalka (j)	...	102.36
B. Torkessur (j)	...	22.23
Bhopal-Itarsi (Native State section) (c)	44.28	
Bhopal-Ujjain (c)	113.27	
Bina-Goonna-Baran (c)	145.63	
Kolar Gold Fields (g)	9.88	
Nagda-Ujjain (f)	34.32	711.33
Nizam's Guaranteed State	830.14	
Pelad-Cambay (Anand-Tatapur section) (f)	21.70	
Pelad-Cambay (Tatapur-Cambay section) (f)	12.31	
Jammu and Kashmir (Native State section) (k)	15.99	
Ludhiana-Dhuri-Jakkhal (k)	78.68	201.69
Rajputana-Bhatinda (k)	107.05	
Cawnpore-Burhwal (Metre gauge line) (i)	79.80	
(viii) Eastern Bengal—		
Behar, Kumaon-Dhubri and Northern sections		852.33
(including the British section of the Santrabari extension and the Ranaghat-Krishnagar and Terest-Kurigram branches)		
Dacca section	088.80	
Assam-Bengal	85.93	
Bellary-Bayadrag (m)	775.28	
Burma	33.35	
Guntakal-Mysore frontier (m)	1,340.15	
Hospet-Kottur (m)	119.50	
Jodhpur-Hyderabad (British section) (n)	43.06	
Lucknow-Bareilly (o)	123.98	
Mysore section (Southern Mahratta) (m)	237.04	7,614.00
Nilgiri (g)	202.22	
Palampur-Deosa (f)	16.69	
Rajputana-Malwa (f)	17.28	
South Indian	(p) 1,782.34	
Southern Mahratta	1,123.05	
Tinnevely-Quilon (Travancore) (British section) (q)	1,042.04	
Tirhoot (r)	80.43	
Tanjore District Board (q)	613.20	
(ix) Ahmedabad-Dholka (f)	38.50	90.46
(x) Ahmedabad-Parantij (f)	54.70	
Myensingh-Jamalpur-Jagannathganj (s)	50.60	138.89
(xi) A. Rohilkhand and Kumaon	...	109.92
B. Dibru-Sadiya	...	77.50
C. Bengal-Deosair	...	36.40
D. Bengal and North-Western	923.88	
Bengal-Deosair Extension	116.50	1,045.21
Dooghur	4.79	
(xiii) Lado and Tikak-Margherita (t)	...	8.50
Bhavnagar-Gondal-Janagad-Forbandar	(u) 334.19	
Bikaner	245.33	
Dharangadra (c)	20.88	
Jamnagar (v)	(w) 84.22	1,320.03
Jodhpur-Rajkot (v)	40.21	
Jodhpur	403.89	
Morvi	(r) 94.64	
Udaipur-Chitor	67.30	
(xiv) Birur-Shimoga (m)	37.92	
Gadwar's Mohana (f)	92.63	
Hindupur (Yessantpur-Mysore frontier) (m)	51.35	
Hyderabad-Godavari Valley (d)	391.13	
Jaipur (f)	33.18	
Kolhapur (m)	29.27	814.99
Mysore-Nanjangud (m)	15.80	
Rohasur-Cochin (g)	64.75	
Tinnevely-Quilon (Travancore) (Native State section) (q)	67.98	
Vijapur-Kalol-Kadi (f)	41.37	
(xv) Karaikkal-Paralam (q)	14.65	
Pondicherry (q)	7.85	73.80
West of India Portuguese (m)	51.10	
(xvi) Dandot Light (2' 0") (4)	6.18	
Jorhat (2' 0")	30.25	
Khushalnagar-Kohat-Thal (2' 6") (k)	91.73	168.41
Nowshera-Dargal (2' 6") (k)	40.25	
Jubbulpore-Gondia Extension (2' 6") (g)	245.05	
Kalka-Simla (2' 0")	50.44	
(xvii) Mohapur-Dharmapuri (2' 0") (g)	18.14	404.25
Balpur-Dhamtari (2' 0") (g)	50.31	
Tirupattur-Krishnagiri (3' 0") (g)	25.38	
A. Darjeeling-Himalayan (2' 0")	51.00	
Thunton-Duyinzaik (2' 0")	7.76	58.76
Baraset-Basirhat Light (2' 0")	28.00	
Bukhtanpur-Bihar Light (2' 0")	18.50	
(xviii) B. Howrah-Amta Light (2' 0")	37.19	121.60
Howrah-Shankhala Light (2' 0")	19.75	
Tezpur-Balapara Light (2' 0")	20.10	
C. Barai Light (2' 6")	27.93	
Powayan Light (2' 6") (o)	39.50	67.43
(xix) Tarakeswar-Magra Light (2' 0")	...	33.27
A. Cutch (2' 0")	...	11.96
Gadwar's Dabhoi (2' 0") (f)	84.49	
Gwallor Light (2' 0") (c)	183.53	
(xx) B. Mourbhani (2' 6") (v)	33.41	373.48
Parikhmedil Light (2' 6") (y)	24.02	
Ruppipla (2' 6") (f)	37.37	
C. Cooh Behar (3' 0") (u)	...	33.60

- (a) Includes 5.63 miles of military line not used for public traffic and 20.28 miles of mixed (5' 6" and 3' 3 1/2") gauge line between Bhatinda and Kot Kapura, worked over by the North Western State and Rajputana-Malwa railways.
- (b) Includes 16.70 miles of mixed (5' 6" and 3' 3 1/2") gauge line between Burhwal and Bara Banki, 0.59 mile on the Cawnpore Bridge and 1.81 mile of 3' 3 1/2" gauge line between the Oudh and Rohilkhand State Railway Cantonment and the Bengal and North-Western Railway City stations at Benares.
- (c) Worked by the Great Indian Peninsula Railway Company.
- (d) Worked by His Highness the Nizam's Guaranteed State Railways Company.
- (e) Includes 30.23 miles of 3' 3 1/2" gauge line between Viranganam and Waltham.
- (f) Worked by the Bombay, Baroda and Central India Railway Company.
- (g) Worked by the Madras Railway Company.
- (h) Includes 1.90 mile of mixed (5' 6" and 3' 3 1/2") gauge line between Beswada and Kistna Block hut and 1.07 mile of 3' 3 1/2" gauge line between Kistna Block hut and Tadepall.
- (i) Worked by the Oudh and Rohilkhand State railway.
- (j) Worked by the East Indian Railway Company.
- (k) Worked by the North Western State railway.

At the commencement of 1906-07, i.e., on the 1st April 1906, the total length of railways open for traffic was 28,611.07 miles, made up as follows:—

5' 6" gauge—	Miles.	Miles.
(i) State lines worked by the State	4,931.85	
(ii) State lines worked by companies	7,363.02	
(iii) Companies' lines guaranteed by Government under the old contracts	904.01	
(iv) Companies' lines guaranteed by Government under modern contracts	32.04	
(v) Branch line companies' railways assisted by Government under "Rebate" terms	814.07	
(vi) Assisted companies' lines—		
A. Subsidized by the Government of India	162.36	
B. Receiving land only from Government	22.23	184.59
(vii) Native State lines—		
A. Worked by companies	711.33	
B. Worked by State railway agency	201.69	913.02
		15,142.60
3' 3 1/2" gauge—		
(viii) State lines worked by the State	852.38	
(ix) State lines worked by companies	7,614.00	
(x) District Boards' lines	99.46	
(xi) Branch line companies' railways assisted by Government under "Rebate" terms	138.89	
(xii) Assisted companies' lines—		
A. Subsidized by the Government of India	109.92	
B. Subsidized by Local Governments	77.50	
C. Subsidized by District Boards	36.40	
D. Receiving land only from Government	1,045.21	1,269.03
(xiii) Unassisted companies' lines	8.50	
(xiv) Native State lines—		
A. Worked by Native States	1,326.63	
B. Worked by companies	814.39	2,141.01
(xv) Lines in Foreign Territory	73.60	12,196.87
Special (2' 6" and 2' 0") gauges—		
(xvi) State lines worked by the State	168.41	
(xvii) State lines worked by companies	404.25	
(xviii) Assisted companies' lines—		
A. Subsidized by Local Governments	58.76	
B. Subsidized by District Boards	121.60	
C. Receiving land only from Government	67.43	247.79
(xix) Unassisted companies' lines	33.27	
(xx) Native State lines—		
A. Worked by Native States	11.86	
B. Worked by companies	373.42	
C. Worked by State railway agency	33.60	417.88
		1,271.60
TOTAL		28,611

- (i) Excludes 3.00 miles of the Lucknow-Bareilly railway between Aishbagh and Daliganj, worked over, but includes 16.70 miles of mixed (5' 6" and 3' 3 1/2") gauge line between Burhwal and Bara Banki and 0.59 mile of the Oudh and Rohilkhand State railway on the Cawnpore Bridge.
- (m) Worked by the Southern Mahratta Railway Company.
- (n) Worked by the Jodhpur-Bikaner railway.
- (o) Worked by the Rohilkhand and Kumaon Railway Company.
- (p) Includes 210 miles at Ujjain, 3.07 miles between Agra Cantonment and Juma East Bank and 0.94 mile between Lahori Gate Cabin and Brewery Cabin, Delhi, laid on the 5' 6" gauge, and 20.28 miles of mixed (5' 6" and 3' 3 1/2") gauge line between Kot Kapura and Bhatinda, worked over by the Rajputana-Malwa and North Western State railways.
- (q) Worked by the South Indian Railway Company.
- (r) Worked by the Bengal and North-Western Railway Company.
- (s) Worked by the Eastern Bengal State railway.
- (t) Worked by the Assam Railway and Trading Company.
- (u) Includes 5.63 miles of Bhavnagar-Gondal-Janagad-Junagad lines.
- (v) Includes 5.63 miles of the Bodi Bandar Dock estates lines.
- (w) Includes 20.70 miles of 3' 6" gauge line between Vankar and Morvi.
- (y) Worked by the Bengal-Nagpur Railway Company.

APPENDIX 40—contd.

And the mileage under construction or sanctioned for construction on the same date, was 3,304·98 miles, as follows:—

	Miles.	Miles.
5' 6" gauge—		
(i) State lines worked by the State	690 56	
(ii) State lines worked by companies	916 23	
(iii) Branch line companies' railways assisted by Government under "Rebate" terms	26 85	
		1,633 63

3' 3½" gauge—

(iv) State lines worked by the State	227 3	
(v) State lines worked by companies	425 38	
(vi) District Boards' lines	49 50	
(vii) Assisted companies' lines—		
	Miles.	
A. Subsidized by the Government of India	92 00	
B. Subsidized by local Governments	8 50	
C. Receiving land only from Government	95 23	
		195 73
(viii) Native State lines worked by companies	82 78	
		980 76

Special (2' 6" and 2' 0") gauges—

(ix) State lines worked by the State	6 50	
(x) State lines worked by companies	329 06	
(xi) Assisted companies' lines—		
	Miles.	
A. Subsidized by District Boards	12 50	
B. Receiving land only from Government	208 32	
		220 82
(xii) Native State lines—		
A. Worked by Native States	44 63	
B. Worked by companies	66 66	
C. Worked by State railway agency	22 02	
		138 31
		690 59
	TOTAL	3,304 98

There was thus a grand total of railways completed and in hand, on the 1st April 1906, of miles 31,916 05

Lines under construction and sanctioned on 31st March 1906.

	Miles.	Miles.	Miles.
Eastern Bengal—			
Kakragschi Chord	2 25		
Lalgola to Lalgola Ghat	3 75		
Panchooria to the Ganges river (a)	6 00		
Nagda-Muttra—			
Kotah to Baran	40 00		
Nagda to Muttra	843 96	383 96	
(i) North Western—			690 56
Kacha Garhi to mile 23	23 00		
Lodhran to Khauwal	58 59		
Bargoda to Shorkot Road	103 14		
Shahdara to Sangla	55 38		
Oudh and Rohilkhand—			
Phaphau to Zafarabad			57 50
Azhikhal-Mangalore			77 27
Bogal-Nagpur—			
Rhojundi to Hariharpur	35 64		
Rhojundi to Parthadihi	3 28		
Branch line near Kanoodih	1 97		
Vizianagram to Raipur	310 33	340 51	
East Indian—			
Agra direct access	1 75		
Barharwa to Katwa	99 14		
Bhagalpur to Bausi	31 04		
Borachuk to Sodepur	4 50		
Chord line between the East Indian and Oudh and Rohilkhand State railways near Moghal Sarai	1 10		
Ghat line to Dhuilian	1 06		
Ghat line to Sajimpara	2 53		
Hooghly to Katwa	65 20		
Khurja to Hapur	38 87		
Mannpur to Dhanbaid	131 49		
Mile 170½ from Howrah on the Jharla branch to Chandore	4 18		
Nagri to Kawunda	1 59		
Ondal to Sainthia	43 63		
Great Indian Peninsula—			
Kurla to Mazagaon	6 51		
Mahim link	1 33		
Warora to Bellary	37 50	46 43	
Madras (North-East line)—			
Korukkuppettai to Basin Bridge			0 85
(Salem-Attur (b))			38 06
(iii) Amritsar-Patti			26 85

(iv) Eastern Bengal—			
Forbesganj to the Nepal Frontier	6 80		
Kathihar to Godagari	106 90		
Kokrajhar to the Brahmaputra river opposite Gualati	118 87	227 37	
Assam-Bengal—			
Akhaura to Ashuganj	19 00		
Kalaura to the Khoosara river	16 00		
Burma—			
Thamaling to Malagaon	6 70		
Burma Extensions—			
Hennada to Kyangin	65 66		
Pegu to Martaban (b)	121 27	186 93	
Nilgiri—			
Coonoor to Ootacamund		11 50	
(v) South Indian—			425 38
Maudapata to Bameswaram Temple	10 13		
Tangachudam to Fort Amphill	1 71		
Tirupachettai to Sivaganga	9 00	20 83	
Tirhoot—			
Balragnia-Narkataganj	58 05		
Bhagalpur Kachery to Bhagalpur	0 79		
Mansi to Bhaptahli	60 37		
Narkataganj to Bagaha	20 00	164 43	
Saharsa to Murliganj	18 61		
(vi) Bezwada-Masulipatam			4 50
A. Rohilkund and Kumaon—			
Lalkua to Kashipur		45 00	
Moradabad to Ramnagar		47 00	92 00
(vii) B. Dibru-Gadiya—			
Talap to Salkha Ghat			8 50
C. Bengal and North-Western—			
Dharonda to Maharajganj		3 90	
Gamsari to Jarwa		13 50	
Gorakhpur to Bagaha		60 94	
Pawan to Thawe		17 83	96 23
(viii) Jaipur—			
Chansama to Bechrari	16 74		
Mannud Road to Harji	21 37	38 11	
Sangli—			
Nawal to Siwai Madhopur		40 67	82 78
Miraj to Sangli Town		4 00	

(ia) Jullundur-Kapurthala-Sultanpur (British section) (c)—			6 80
Jullundur to the British Frontier			
Gondia-Chanda (2' 6")—			
Gondia to Chanda	146 65		
Panni (Brahmapuri) to Nagpur	63 75	213 40	
(x) Jubbalpore-Gondia Extension (2' 6")—			329 06
Khirsadoli to Burkuhi	5 08		
Khirsadoli to Sirgona	7 76		
Nainpur to Mandla	33 14	44 08	
Purnia-Banchi (2' 6")—			72 28
A. Howrah-Amra Light (2' 0")—			
Autpur to Champadanga (b)		9 00	
Autpur to Rajbhat (b)		3 50	12 50
(xi) Barai Light (2' 6")—			
Barai Road Junction to Pandharpur	30 07		
Kuslamb to Tadwale	20 36	51 03	
Dwar-Therria Light (2' 6")—			
Dwara to Maolong (d)	13 50		
Maolong to Therria Ghat (b)	6 00	19 50	
B. Matheran (2' 0")—			208 32
Noral to Matheran		13 79	
Shahdara (Delhi)-Saharanpur Light (2' 6")—			
Baraut to Meerut	30 00		
Shahdara to Saharanpur	96 00	126 00	
Cutch (2' 6")—			
A. Anjar to Bhuj	25 30		
Dholpur-Barai (2' 6")	19 25	44 55	
(xii) B. Gwalior Light (2' 0")—			
Babalgarh to Shipur			66 66
C. Jullundur-Kapurthala-Sultanpur (Native State section)—			
Sultanpur to the British Frontier (c)			22 02

(a) Constructed but not worked.
(b) Commencement of work not authorised.

(c) Commencement of work not authorised and question of gauge not finally settled.
(d) Completion deferred.

APPENDIX 40—*contd.**New Lines authorized.*

		Miles.	Miles.	Miles.
(i)	North Western—			
	Shorkot Road to Chichoki	130.80	190.40	278.88
	Thal to Parachinar	60.60		
	Oudh and Rohilkhand—			
	Balamau to Sitapur	37.12	88.48	
Rosa to Sitapur	51.36			
(ii)	Bengal-Nagpur—			
	Kamptee to Ramtek	14.74	61.27	70.58
	Kandri branch	3.63		
	Sini to Garumalshini	43.00		
	East Indian—			
Toposi to Baraboni		9.31		

During 1906-1907, i.e., from 1st April 1906 to the 31st March 1907, 520.20 miles of new railway have been authorized as follows:—

	Miles.	Miles.
5' 6" gauge—		
(i) State lines worked by the State	278.88	
(ii) State lines worked by companies	70.58	
		349.46

(iii) Burma— Nekhen to Hegayet	60.25	108.21
Hospet-Kottur— Ramandrug Junction to Ramanamalai	4.06	
Kurnool Road-Kurnool	32.00	
(iv) Bengal and North-Western— Burdwan to Sitapur		59.80
(v) Gackwar's Meliana— Khoralu to Dabhora		7.73

3' 3½" gauge—		
(iii) State lines worked by companies	103.21	
(iv) Assisted companies' lines receiving land only from Government	69.80	
(v) Native State lines worked by companies	7.73	
		170.74
TOTAL	520.20	

Lines opened or likely to be opened.

(vi) Eastern Bengal— Kakergachi Chord	2.75	219.07
North Western— Shahdara to Saigla	55.50	
Shorkot Road to Sargoda	103.14	
Oudh and Rohilkhand— Phaphamau to Zafarabad	53.18	
(vii) Ashkal-Mangalore	77.27	350.91
Bengal-Nagpur— Bhojudih to Gomoh (Hariharpur)	25.04	
Branch line near Khanoodih	1.97	
East Indian— Kharja to Hapur	37.87	
Mampur to Dhanbaid	122.17	297.50
Tatimari (Nagri) to Kanauda	1.50	
Ondal to Saluthia	44.06	
Great Indian Peninsula— Warora to Bellarpur	37.59	
Madras (North-East line)— Korrukuppetai to Basin Bridge	0.85	
(viii) Amritsar-Patti		27.40

And 951.84 miles have been, or are likely to be, opened to public traffic as follows:—

5' 6" gauge—	Miles.	Miles.
(vi) State lines worked by the State	219.07	
(vii) State lines worked by companies	350.91	
(viii) Branch line companies' railways assisted by Government under "Rebate" terms	27.49	
		597.47

(ix) Hospet-Kottur— Ramandrug Junction to Ramanamalai	4.06	171.66
South Indian— Pamban beach to Rameswaram	6.55	
Tirhoot— Balragua to Narkatinganj	58.05	
Mandi to Bapthali	60.37	
Narkatinganj to Bagaha	25.62	162.05
Bagaha to Murliganj	18.61	
(x) Tanjore District Board— Arantangi Quarry Branch (a)		3.90
(xi) Mymensingh-Jamulpur Jagannathganj— New line laid at Jagannathganj (a)		2.53
(xii) Bengal and North-Western— Dharonda to Maharajganj	3.00	92.14
Gainsari to Jarwa	9.47	
Gorakhpur to Bagaha	60.04	
Savan to Thawe	17.63	
(xiii) Sangli— Miraj to Sangli		4.44

3' 3½" gauge—		
(ix) State lines worked by companies	174.56	
(x) District Board's lines	3.90	
(xi) Branch line companies railways assisted by Government under "Rebate" terms	2.53	
(xii) Assisted companies' lines receiving land only from Government	92.14	
(xiii) Native State lines worked by companies	4.44	
		277.57

(xiv) Jubbalpur-Gondia Extension (2' 6")— Khirandoh to Barkuhi	5.06	12.84	13.62
Khirandoh to Sirgona	7.70		
Raipur-Dhamtari (2' 6")— Rajim to Rajim Town (a)		0.78	
(xv) Barai Light (2' 6")— Barai Road Junction to Pandharpur	30.31	50.67	63.18
Kuslamb to Tadwale	20.36		
Matheran (2' 0")		12.61	

Special (2' 6" and 2' 0") gauges—		
(xiv) State lines worked by companies	13.62	
(xv) Assisted companies' lines receiving land only from Government	63.18	
		76.80
TOTAL	951.84	

* Correction of mileage.

(a) These lines are not shown as under construction at the beginning of the year as no intimation was received of their being under construction.

APPENDIX 40—contd.

The total length of open line at the commencement of 1907-1908, i.e., on the 1st April 1907 will, therefore, be 29,571.32† miles, comprising—

5' 6" gauge—	Miles.	Miles.
(i) State lines worked by the State	5,150.92	
(ii) State lines worked by companies	7,720.15	
(iii) Companies' lines guaranteed by Government under the old contracts	904.01	
(iv) Companies' lines guaranteed by Government under modern contracts	32.04	
(v) Branch line companies' railways assisted by Government under "Rebate" terms	842.11	
(vi) Assisted companies' lines—		
A. Subsidized by the Government of India	102.36	
B. Receiving land only from Government	22.23	
	<hr/>	184.59
(vii) Native State lines—		
A. Worked by companies	711.32	
B. Worked by State railway agency	201.69	
	<hr/>	913.01
		<hr/> 15,746.83
3' 3½" gauge—		
(viii) State lines worked by the State	852.94	
(ix) State lines worked by companies	7,781.52	
(x) District Boards' lines	103.36	
(xi) Branch line companies' railway assisted by Government under "Rebate" terms	141.42	
(xii) Assisted companies' lines—		
A. Subsidized by the Government of India	117.87	
B. Subsidized by local Governments	77.50	
C. Subsidized by District Boards	36.40	
D. Receiving land only from Government	1,137.42	
	<hr/>	1,369.19
(xiii) Unassisted companies' lines		8.50
(xiv) Native State lines—		
A. Worked by Native States	1,326.63	
B. Worked by companies	818.62	
	<hr/>	2,145.45
(xv) Lines in Foreign Territory	73.60	
	<hr/>	12,475.98
Special (2' 6" and 2' 0") gauges.		
(xvi) State lines worked by the State	227.85	
(xvii) State lines worked by companies	358.74	
(xviii) Assisted companies' lines—		
A. Subsidized by Local Governments	58.76	
B. Subsidized by District Boards	121.60	
C. Receiving land only from Government	130.61	
	<hr/>	310.97
(xix) Unassisted companies' lines		33.27
(xx) Native State lines—		
A. Worked by Native States	11.67	
B. Worked by companies	372.41	
C. Worked by State railway agency	33.60	
	<hr/>	417.68
		<hr/> 1,348.51
		<hr/> TOTAL

TOTAL 29,571.32

Open lines on 1st April 1907.

	Miles.	Miles.
(i) Eastern Bengal	500.20	
(ii) North Western	3,427.40	6,130.95
(iii) Oudh and Rohilkhand	1,233.25	
(iv) Agra-Delhi Chord (c)	125.90	
(v) Azhikul-Mangalore (d)	77.27	
(vi) Bengal-Nagpur	1,763.83	
(vii) Bezawada extension (a)	20.68	
(viii) Bhopal-Itarsi (British Section) (e)	13.11	
(ix) Bombay, Baroda and Central India	504.35	7,720.15
(x) East Indian	2,208.98	
(xi) Godhra-Rutlam-Nagda (g)	141.14	
(xii) Great Indian Peninsula	1,890.22	
(xiii) Indian Midland (e)	904.01	
(xiv) Madras (North-East line) (d)	49.04	
(xv) Madras . . . . .	...	904.01
(xvi) Hardwar-Dehra (i) . . . . .	...	82.04
(xvii) Amritsar-Patiala (j)	27.40	
(xviii) South Bihar (k)	78.76	
(xix) Southern Punjab (j)	435.33	512.11
(xx) Southern Punjab (Ludhiana) Extension (j)	158.05	
(xxi) Tapil Valley (p)	156.48	
(xxii) A. Dehli-Umballa-Kaika (k) . . . . .	...	182.36
(xxiii) B. Tarkesaur (k) . . . . .	...	23.63
(xxiv) Bhopal-Itarsi (Native State Section) (e)	44.28	
(xxv) Bhopal-Ujjain (c)	113.27	
(xxvi) Bina-Gooma-Baran (e)	145.63	
(xxvii) Kolar old-Berda (d)	9.58	
(xxviii) A. Nagda-Ujjain (g)	31.31	711.32
(xxix) B. Nizam's Guaranteed State	330.14	
(xxx) Petlad-Cambay (Anand-Tarapur section) (g)	21.67	
(xxxi) Petlad-Cambay (Tarapur-Cambay section) (g)	12.30	
(xxxii) Jammu and Kashmir (Native State section) (j)	18.93	
(xxxiii) B. Ludhiana-Divri-Jahhal (j)	78.66	201.69
(xxxiv) Rajpura-Bhatinda (j)	107.05	
(xxxv) Calcutta-Hughwal (Metric gauge line)	70.00	
(xxxvi) Eastern Bengal—		
(xxxvii) Behar, Kaimla-Dhuhri and Northern section (including the British section of the Santrabari extension and the Ranaghat-Krishnagar and Tarkesaur branches)	667.41	852.94
(xxxviii) Daroga section	85.92	
(xxxix) Assam Bengal	775.29	
(xl) Bellary-Rayadrug (m)	33.83	
(xli) Barua	1,340.15	
(xlii) Guntakul-Mysore frontier (m)	119.60	
(xliii) Ho-pet-Kotwar (m)	46.02	
(xliv) Jodhpur-Itarsi (British section) (n)	123.98	
(xlv) Lucknow-Bareilly (a)	237.04	
(xlvi) Mysore section (Southern Mahratta) (m)	296.23	7,781.52
(xlvii) Kaleri (d)	16.99	
(xlviii) Jalapur-Dahanu (g)	17.28	
(xlix) Rajpura-Malwa (g)	1,774.36	
(l) South Indian	1,137.00	
(li) Southern Mahratta	1,048.04	
(lii) Tanjore-Dindigul (Travancore) (British section) (g)	770.63	
(liii) Tirhoot (i) . . . . .	...	103.36
(liv) Tanjore District Board (g)	33.50	
(lv) Agra-Lahore-Dhokra (g)	54.70	141.42
(lvi) Ahmedabad-Parantij (g)	53.21	
(lvii) Mysore-Singh Jamalpur Jagannathganj (a) . . . . .	...	117.87
(lviii) A. Rohitkund and Kumaon . . . . .	...	77.50
(lix) B. Dibru-Sadiya . . . . .	...	36.40
(lx) C. Bengali-Bocara . . . . .	...	...
(lxi) D. Bengal and North-Western	1,010.07	
(lxii) D. Bengal Doonars Extensions	116.56	1,137.42
(lxiii) Deothar	4.75	
(lxiv) Ledo and Tikak-Margherita (i) . . . . .	...	8.50
(lxv) Bhuvanagar-Bondal-Jungad-Parbandar	334.10	
(lxvi) Bikaner	247.35	
(lxvii) Bhuvanagar (c)	20.63	
(lxviii) Jamnagar (e)	61.22	1,326.63
(lxix) A. Jodhpur-Raykot (e)	46.31	
(lxx) Jodhpur	463.10	
(lxxi) Morvi	94.64	
(lxxii) Udaipur Chitor	67.30	
(lxxiii) Barua-Mh-moga (m)	37.52	
(lxxiv) Gackwar's Mebana (g)	93.43	
(lxxv) Hindupur (Yesvapur-Mysore frontier) (m)	51.35	
(lxxvi) Hyderabad-Rodavari Valley (e)	391.13	
(lxxvii) Jainu (g)	82.13	
(lxxviii) Kolhapur (m)	28.27	
(lxxix) My. Gur-Nangangud (m)	15.40	818.62
(lxxx) Singli (m)	4.41	
(lxxxi) Shorapur-Cochla (d)	64.75	
(lxxxii) Tanjore-Dindigul (Travancore) (Native State section) (i)	57.98	
(lxxxiii) Vijapur-Kul-Kadi (g)	41.37	
(lxxxiv) Karsakul-Petalam (g)	14.05	
(lxxxv) Pondicherry (g)	7.85	73.60
(lxxxvi) West of India Portuguese (m)	51.10	
(lxxxvii) Dindigul Light (2' 0") (j)	6.18	
(lxxxviii) Jodhpur (2' 0")	30.25	
(lxxxix) Kalka-Simla (2' 0") (j)	59.45	227.85
(lxxxx) Khushalnagar-Kohat-Lhal (2' 6") (j)	9.73	
(lxxxxi) Nowshera-Dargai (2' 0") (j)	40.23	
(lxxxxii) Jodhpur-Bondal Extension (2' 0") (g)	257.89	
(lxxxxiii) Kalka-Simla (2' 0") . . . . .	...
(lxxxxiv) Morapur-Dharmapuri (2' 0") (d)	18.23	358.74
(lxxxxv) Raipur-Dhamtal (2' 0") (a)	56.04	
(lxxxxvi) Timpattur-Krishnagiri (2' 0") (d)	26.39	
(lxxxxvii) Darjeeling Himalayan (2' 0")	51.00	
(lxxxxviii) A. Thorton-Dumyauk (2' 6")	7.70	58.76
(lxxxxix) Baranot-Basirhat Light (2' 6")	26.00	
(lxxxxx) Bukhtarpur-Bihar Light (2' 6")	19.50	
(lxxxxxi) B. Howrah-Amra Light (2' 0")	37.19	121.00
(lxxxxxii) Howrah-Sheakhola Light (2' 0")	19.75	
(lxxxxxiii) Tezpur-Balipara Light (2' 6")	20.10	
(lxxxxxiv) C. Baral Light (2' 0")	58.50	
(lxxxxv) Matheran (2' 0") (c)	12.61	130.61
(lxxxxvi) Powayan Light (2' 0") (a)	39.50	
(lxxxxvii) Tarakeswar-Nagra Light (2' 0") . . . . .	...	33.27
(lxxxxviii) A. Cutch (2' 0") . . . . .	...	11.67
(lxxxxix) Gackwar's Dabhol (2' 0") (g)	94.49	
(lxxxxx) Gwallior Light (2' 0") (c)	184.33	
(lxxxxxi) Mourbhag Light (2' 0") (g)	42.41	372.41
(lxxxxxii) Pakhameti Light (2' 0") (g)	24.02	
(lxxxxxiii) B. Pipria (2' 0") (b)	37.37	
(lxxxxxiv) C. Cutch Behar (2' 6") (a) . . . . .	...	33.60

(a) See foot-note (a) on page 258.

(b) See foot-note (b) on page 258.

(c) Worked by the Great Indian Peninsula Railway Company.

(d) Worked by the Madras Railway Company.

(e) Worked by His Highness the Nizam's Guaranteed State Railways Company.

(f) Includes 50.28 miles of 3' 3½" gauge line between Virangam and Wadhwan.

(g) Worked by the Bombay, Baroda and Central India Railway Company.

(h) See foot-note (h) on page 258.

(i) Worked by the Oudh and Rohilkhand State railway.

(j) Worked by the North Western State railway.

(k) Worked by the East Indian Railway Company.

(l) See foot-note (l) on page 258.

(m) Worked by the Southern Mahratta Railway Company.

(n) Worked by the Jodhpur-Bikaner railway.

† Correction of mileage.

‡ Made up as follows:—

Open at the commencement of 1906-07

Opened during 1906-1907

Add—

Malkera-Mahuda section of the Bengal-Nagpur railway, hitherto excluded

Net increase due to corrections of mileage

28,611.07

851.84

29,562.91

8.24

5.17

TOTAL

29,571.32

(o) Worked by the Rohilkhand and Kumaon Railway Company.

(p) See foot-note (p) on page 258.

(q) Worked by the South Indian Railway Company.

(r) Worked by the Bengal and North-Western Railway Company.

(s) Worked by the Eastern Bengal State railway.

(t) Worked by the Assam Railways and Trading Company.

(u) Includes 5.23 miles of Bhuvanagar-Dock estates and Jungad quarry lines.

(v) Worked by the Bhuvanagar-Bondal-Jungad-Parbandar railway.

(w) Includes 5.23 miles of the Redi-Bandar Dock estate lines.

(x) Includes 20.70 miles of 2' 6" gauge line between Vankar and Morvi.

(y) Worked by the Bengal-Nagpur Railway Company.

(z) Made over to the North Western State Railway Administration for working from the 1st January 1907.

Appendix 40—contd.

Lines under construction and sanctioned on 31st March 1907.

And the mileage under construction or sanctioned for construction on the 31st March 1907 will be 2,873·17 miles, made up as follows:—

	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
(i) Eastern Bengal— Lalgola to Lalgola Ghat Panchooria to the Ganges river (a)	2·75 8·00	8·75				
Nagda-Muttra— Kotah to Baran Nagda to Muttra	40·00 343·18	383·18				
(ii) North Western— Kacha Garhi to mile 23 Khushalgarh bridge and approaches Lodhran to Khanawal Shorkot Road to Chichoki Thal to Purnehar Oudh and Rohilkhand— Balamau to Sitapur Rosa to Sitapur	23·00 3·63 36·50 130·80 69·00 37·12 61·30	754·83				
Bengal-Nagpur— Kamptee to Ramtek Kandri branch Sini to Gurumai-hini Vizianagram to Raipur East Indian— Azra direct access Barbarwa to Katwa Bhagalpur to Bausi Boraehuk to Sodepur Chand line between the East Indian and Oude and Rohilkhand State railways near Moghal Sarai Ghat line to Dhulian Ghat line to Rajimpara Hooghly to Katwa Mile 170½ from Howrah on the Jharia branch to Chandore Tajpuri to Baraboni Great Indian Peninsula— Kurla to Mazgaon Mahan link Salem-Attur (b)	14·74 2·53 41·00 310·02 1·75 99·11 31·01 4·60 1·19 1·06 2·50 65·20 4·16 9·31 6·51 1·32	311·83				
(iii) Eastern Bengal— Forbesganj to the Nepal Frontier Katihar to Godugari Kokrajhar to the Brahmaputra river opposite Gauthari	6·50 103·00 115·87	227·37				
Assam-Bengal— Akhaura to Ashaganj Kalaure to the Khoosara river Barma— Naikban to Begayet Thanning to Malagaon Burma Extensions— Henzada to Kyangin Fogu to Marlaban Kurnool Road-Kurnool Nilgiri— Coonoor to Ootacamund South Indian— Portion of the Rameswaram extension Tungachinmadam to Port Annapthill Tiruppathetti to Sivagunga Tirthoot— Bhaga-pur Kachery to Bhagalpur Bezwada-Masulipatam A. Rohilkund and Kumaon— Lalkua to Kashipur Moradabad to Ramnagar B. Dibru-Sadia— Talpy to Saikhoa Ghat C. Bengal and North-Western— Barhwal to Sitapur Gackwar's Mohana— Chausama to Bechroji Kharala to Dabhora Mauud Road to Haraj Jaipur— Nuwai to Sawai Madhopur	10·00 16·00 66·25 0·70 65·67 121·27 32·00 41·75 3·17 1·71 9·01 0·79 36·43 47·69 8·50 59·80 16·74 7·73 21·37 40·65	35·00 72·95 186·93 353·30 41·75 1,388 0·79 49·47 84·13 8·50 59·80 16·84 66·19				
(iv) Jullundur Kapurthala-Sultanpur (British section) (c)— Jullundur to the British frontier		6·81				
(v) Gondia-Chanda (2' 6")— Gondia to Chanda (b) Pandi (Brahm spuri) to Nagpur (b) Jabalpur-Gondia Extension (2' 6")— Nainpur to Mandla Painulia-Bauchi (2' 6") A Howrah-Amta Light (2' 0")— Antpur to Champadanua (b) Antpur to Rajbhat (b) Dwara Thorma Light (2' 6")— Dania to Malong (d) Malong to Thorma Ghat (d) B. Shahdara (Delhi-Bahranpur Light (2' 6")— Baraut to Meerut Shahdara to Saharanpur C. Cateh (2' 6")— Anjar to Bhuj Chopar-Bari (2' 6") B. Gadhok Light (2' 0")— Sabakgarh to Sheupur C. Jullundur-Kapurthala-Sultanpur (Native State section)— Sultanpur to the British Frontier (e)	144·05 63·75 32·14 72·28 9·00 3·50 13·50 6·29 30·00 93·00 25·38 10·25 66·30 22·02	212·40 316·83 12·50 144·50 44·63 66·30 22·02				
(vi) Jullundur-Kapurthala-Sultanpur (Native State section)— Sultanpur to the British Frontier (e)		22·02				

5' 6" gauge—
(i) State lines worked by the State 754·83
(ii) State lines worked by companies 635·63
1,390·46

3' 3½" gauge—
(iii) State lines worked by the State 227·37
(iv) State lines worked by companies 353·30
(v) District Boards' lines 49·47
(vi) Assisted companies' lines—
A. Subsidized by the Government of India 84·12
B. Subsidized by Local Governments 8·50
C. Receiving land only from Government 59·80
152·42
(vii) Native State lines worked by companies 86·49
869·05

Special (2' 6" and 2' 0") gauges—
(viii) State lines worked by the State 6·80
(ix) State line worked by companies 316·82
(x) Assisted companies' lines—
A. Subsidized by District Boards 12·00
B. Receiving land only from Government 144·50
157·00
(xi) Native State lines—
A. Worked by Native States 44·63
B. Worked by companies 66·30
C. Worked by State railway agency 22·02
133·04
613·66

TOTAL 2,873·17
Making a grand total of railways completed and in hand, at the commencement of 1907-1908 of miles + 32,444·49

And showing, after allowing for lines abandoned and corrections of mileage, an advance on the previous year of miles 528·44

(a) Constructed but not worked.
(b) Commencement of work not authorized.
(c) Commencement of work not authorized and question of gauge not finally settled.

(d) Completion deferred.
* Correction of mileage.

† Made up as follows:—

	Miles.
Completed and in hand at the beginning of 1906-07	31,916·05
Sanctioned during 1906-1907.	520·20
Add—	32,436·25
Malkera-Mohuda section of the Bengal-Nagpur railway hitherto excluded.	3·24
Khushalgarh bridge and approaches North-Western State Railway hitherto excluded	3·63
Net increase due to corrections of mileage	3·55
	32,444·77
Deduct—	
Bhejudib-Parthadib link of the Bengal-Nagpur railway abandoned	3·29
	32,441·49

Appendix 40—concl'd.

It is expected that the following lengths of unfinished line will be opened for public traffic in 1907-1908:—

	Miles.	Miles.	
5' 6" gauge—			
(i) State lines worked by the State	144 88		
(ii) State lines worked by companies	26 85		
		171 73	
3' 3½" gauge—			
(iii) State lines worked by the States	36 00		
(iv) State lines worked by companies	217 68		
(v) District Boards' lines	49 47		
(vi) Assisted companies' lines subsidized by the Government of India	84 12		
(vii) Native State lines worked by companies	86 49		
		473 76	
Special (2' 6" and 2' 0") gauges—			
(viii) State lines worked by companies	72 28		
(ix) Assisted companies' lines receiving land only from Government	95 00		
(x) Native State lines worked by Native States	19 25		
		186 53	
TOTAL		832 02	

Leaving the undermentioned lines for completion in 1908-1909 or later:—

	Miles.	Miles.	Miles.
5' 6" gauge—			
(xi) State lines worked by the State	609 95		
(xii) State lines worked by companies	608 78		
		1,218 73	
3' 3½" gauge—			
(xiii) State lines worked by the State	191 37		
(xiv) State lines worked by companies	135 62		
(xv) Assisted companies' lines—			
A. Subsidized by Local Governments	8 50		
B. Receiving land only from Government	59 80		
		68 30	
		395 29	
Special (2' 6" and 2' 0") gauges—			
(xvi) State lines worked by the State	6 80		
(xvii) State lines worked by companies	244 54		
(xviii) Assisted companies' lines—			
A. Subsidized by District Boards	12 50		
B. Receiving land only from Government	49 50		
		62 00	
(xix) Native State lines—			
A. Worked by Native States	25 39		
B. Worked by companies	6 39		
C. Worked by State railway agency	22 02		
		113 79	
TOTAL		2,041 15	

	Miles.	Miles.	Miles.
(i) Eastern Bengal—			
Lalgola to Lalgola Ghat	2 75		
(ii) Nagda-Muttia—			
Nagda to Kotah	136 80		
North Western—			
Khushalgarh bridge and approaches	3 63		
(iii) Bengal-Nagpur—			
Kamptee to Ramtek	14 74		
Kandri branch	2 63		
(iv) East Indian—			
Agra direct access	1 75		
(v) Great Indian Peninsula—			
Kurla to Mazgaon	6 51		
Mahim link	1 32		
(vi) Eastern Bengal—			
Forbaganj to the Nepal Frontier	6 50		
Kokrajhar to Digni	29 50		
(vii) Assam-Bengal—			
Abhaura to Ashuganj	19 00		
(viii) Burma Extensions—			
Honzada to Kyangin	65 60		
Pegu to Martaban	131 27		
(ix) Nilgiri—			
Coonoor to Ootacamund	11 75		
(x) Bezwada-Masulipatam			
(xi) Rohilkund and Kumaon—			
Lalkua to Kashipur	36 43		
Moradabad to Ramnagar	47 69		
(xii) Gackwar's Mohana—			
Chansama to Bichraji	16 74		
Keroli to Dabhora	7 73		
Manund Road to Harij	21 37		
(xiii) Jaipur—			
Naval to Sival Madhopur	40 65		
(xiv) Purnia-Ranchi (2' 6")			
(xv) Shahdara (Delhi) Saharanpur Light (2' 6")			
(xvi) Dholpur-Bari (2' 6")			
(xvii) Eastern Bengal—			
Panchgola to the Ganges river (a)	6 00		
(xviii) Nagda-Muttia—			
Kotah to Baran	40 00		
Kotah to Muttia	205 48		
(xix) North Western—			
Kacha Garhi to mile 23	23 00		
Ludhian to Khawwal	50 59		
Bhorwal Road to Chichoki	130 80		
Thal to Parachinar	50 00		
(xx) Oudh and Rohilkhand—			
Balawan to Sitapur	37 12		
Kosa to Sitapur	51 36		
(xxi) Bengal-Nagpur—			
Sili to Gurumaijini	44 00		
Vizianagram to Raipur	310 02		
(xxii) East Indian—			
Barharwa to Katwa	99 14		
Bhagalpur to Housi	31 64		
Bombehuck to Bodepur	4 50		
(xxiii) Chord line between the East Indian and Oudh and Rohilkhand State Railways			
near Moghal Sarai	1 19		
Ghat line to Dholian	1 08		
Ghat line to Sajimpura	2 50		
Hooghly to Katwa	86 20		
Mile 170½ from Howrah on the Jharria branch to Chandore	4 14		
Toprai to Baraboni	9 31		
(xxiv) Salem-Attur (b)			
(xxv) Eastern Bengal—			
Bijui to the Brahmaputra river opposite Gauhati	66 37		
Kathiar to Godagari	106 00		
(xxvi) Assam-Bengal—			
Kalaura to the Khoosara river	16 00		
(xxvii) Burma—			
Neikban to Begayet	60 25		
Thamazing to Malagaon	6 70		
(xxviii) Kurnool Road Kurnool			
(xxix) South Indian—			
Portion of the Rameswaram extension	3 17		
Tangachinadam to Port Amphill	1 21		
Trupphachetti to Sivagunga	9 00		
(xxx) Tirhoot—			
Bhagalpur-Kachery to Bhagalpur	0 79		
(xxxi) A Dihru-Sadya—			
Talup to Sakhoa Ghat			
(xxxii) B. Fengal and North-Western—			
Burhwal to Sitapur			
(xxxiii) Jullundur-Kapurthala-Sultanpur (British section)—			
Jullundur to the British Frontier (c)			
(xxxiv) Goudia-Chanda (2' 6")—			
Goudia to Chanda (b)	148 05		
(xxxv) Punt (Brahmapuri) to Nagpur (d)	63 75		
(xxxvi) Jubbulpur-Goudia Extension (2' 6")—			
Nainpur to Mandla	32 14		
(xxxvii) A. Howrah-Amta Light (2' 0")—			
Amta to Chomudanga (b)	9 00		
(xxxviii) Amta to Rajbhat (c)	3 80		
(xxxix) Dwara-Therria Light (2' 6")—			
Dwara to Maolong (d)	13 50		
(xl) Maolong to Therria Ghat (b)	6 00		
(xli) Shahdara (Delhi) Saharanpur Light (2' 6")—			
Barant to Meerut	30 00		
(xlii) A. Catch (2' 6")—			
Anjar to Rhuji			
(xliii) B. Gwalior Light (2' 0")—			
Sabalgarh to Shilpur			
(xliv) C. Jullundur-Kapurthala-Sultanpur (Native State section)—			
Sultanpur to the British Frontier (c)			

(a) Constructed but not worked.

(b) Commencement of work not authorized.

(c) Commencement of work not authorized and question of gauge not finally settled.

(d) Completion deferred.

APPENDIX 41.

No. 514 R. C. of 1896.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

RAILWAY CONSTRUCTION.

Simla, the 17th April 1896.

Terms on which the Government of India are prepared to consider offers for the construction by the agency of private companies of branch lines forming feeders either to State lines worked by the State or to railways worked by companies.

Read—

Public Works Department resolution No. 924 R.C., dated 15th September 1893.

Public Works Department resolution dated 29th March 1895.

OBSERVATIONS—Many of the applications made under the above resolutions show that the terms for the construction of branch or feeder lines of railway have not been fully understood.

The Government of India have accordingly resolved to cancel the previous resolutions above quoted upon this subject, and to issue a fresh resolution embodying a summary of the concessions which (the previous assent of any railway company concerned having been first obtained) they are now prepared to give for the construction of branch or feeder railways, such concessions being usually confined to lines not exceeding 100 miles in length.

2. It should be clearly understood that these concessions are not applicable to the larger or more important railways or to mountain branches, for which separate negotiations are in all cases necessary.

RESOLUTION.—Branch lines forming feeders, whether to State lines worked by the State or to railways worked by companies, will ordinarily be made by the main line administrations who shall have a prior right to construct them.

The Government of India will, from time to time, publish a list of branch lines for the construction of which they are prepared to receive tenders.

They will consider and dispose of any application for the inclusion in the said list of any other line which can properly be described as a branch or feeder line, and which does not, except in special circumstances, exceed 100 miles in length.

2. Proposals for the construction of branch lines under this resolution must conform to the following terms and conditions:—

- (i) Applicants must satisfy the Government that they are in a position to command substantial financial support.
- (ii) The gauge to be adopted must be approved by the Government in each case.
- (iii) The proposed railway shall be subject to the provisions of all Acts of the Legislature applicable to Indian railways.
- (iv) The proposed railway shall be built in accordance with the fixed and moving dimensions for the time being prescribed by the Governor General in Council, and on plans and estimates that have been approved by that authority. The route of the line, the situation of stations, and other similar details shall be subject to approval by the Government.

APPENDIX 41—*contd.*

(v) The line, while under construction, shall be inspected when and so often as an inspecting officer appointed for that purpose by the Government may consider desirable with a view to ensure the construction of the line up to the standard agreed upon.

(vi) Inasmuch as these railways are chiefly required for the development of country hitherto deficient in means of communication, and the anticipated profits may not therefore at once be fully realised the Government of India are prepared to give financial assistance as set forth below. Proposals for financial concessions may be made in one or other of the following alternative forms:—

(a) It may be stipulated that, after the opening of the railway for traffic, the Government shall guarantee out of the revenues of India a fixed yearly minimum dividend in rupees on the actual expenditure charged in the capital account of the branch railway company as entered in rupees in the company's books in India, with such share of the surplus net profits as may be agreed upon. The minimum dividend to be guaranteed in each particular case will depend upon consideration of the circumstances, but for the present no offer will be entertained that requires a guarantee exceeding 3 per cent. ; or

(b) It may be provided that a payment be made to the branch company by the main line to the extent necessary, together with the branch company's share of branch earnings [see section (6) of paragraph 3] to give the branch company a dividend of $3\frac{1}{2}$ per cent. per annum on the actual expenditure charged in the capital account of the branch railway company as entered in rupees in the company's books in India, provided always that the payment so made to the branch company shall in no case exceed the net earnings of the main line from traffic interchanged with the branch. This rebate will be granted from the first earnings of revenue by the branch, such payment being calculated at the close of the year, payments on account, however, subject to adjustment, being permissible at the close of the first-half of each year. The net earnings of the main line from traffic interchanged with the branch are assumed to bear the same proportion to the gross earnings of the main line from such traffic as the net earnings of the whole system including the branch bear to the gross earnings thereof. If the net earnings of the branch line equal or exceed $3\frac{1}{2}$ per cent. on the actual expenditure as above, the whole of such earnings will go to the branch company.

In either of the above cases, (a) or (b), if the capital is raised in sterling the capital to be entered in rupees in the company's books in India shall be the actual amount realised in rupees from time to time by the several remittances of funds to provide for expenditure in India, together with the sterling outlay from time to time in England converted into rupees at the average rate of exchange obtained by the Secretary of State for his remittances during the half-year preceding that in which the outlay shall have been incurred, and the capital expenditure in rupees on which the interest is from time to time to be calculated for the purposes of the guarantee or rebate, as the case may be, shall be the total outlay whether in India or England up to any such time as thereto charged.

(vii) The general character of the supervision and control that will be exercised by the Government over the branch railway, apart from

APPENDIX 41—*contd.*

the provisions of the Railways Acts and the preceding provisions of this resolution, shall be as follows:—

- (a) No capital expenditure by the branch railway company will be allowed as between the Secretary of State and the company unless the prior sanction of the Secretary of State shall have been obtained. The company shall have no power to increase its share or stock capital without the sanction of the Secretary of State or to borrow money except within a fixed limit and on specified conditions.
 - (b) The branch railway company, if required, shall keep capital accounts and statistics in forms approved by the Secretary of State; and shall render, free of cost, all accounts and statistics required by the Government. The accounts and books will be subject to audit on behalf of Government.
 - (viii) Funds for the execution of new works, properly chargeable to capital, found necessary after the branch railway has been opened to public traffic shall be provided by the branch railway company. Such works and their cost shall be agreed upon between the branch railway company and the main line administration before they are put in hand. In the event of any difference of opinion arising between the branch railway company and the main line administration as to the necessity for and the cost of any new work, the matter shall be referred to the Director of Railway Construction as arbitrator, and his decision shall be final.
 - (ix) The rates and arrangements in force on State railways in the matter of services rendered to all departments of the State shall apply.
3. The following are the principal additional concessions admissible for branch or feeder railways for the construction of which tenders may be invited:—
- (1) The Secretary of State for India in Council, or the Government of India, respectively, will permit the charge of interest, at a rate to be agreed upon in each case, during construction to the capital account of the railway under the terms of the Indian Railways Act of 1894 (57 and 58 Vict., chapter 12), or the Indian Railway Companies Act, X of 1895.
 - (2) The land required for the construction of the branch railway will be provided free of cost. Such grant shall not include land required for quarrying, ballast, brickfields and kindred purposes.
 - (3) Electric telegraphs and telegraphic appliances will be supplied and maintained by the Government of India at the usual charges for such works.
 - (4) The results of existing surveys will be made available free of charge. When desired, fresh surveys will be made by the Public Works Department* of the Government of India of any branch railway on the applicants depositing the estimated cost thereof in a Government Treasury, on the understanding that no preferential claim to a concession is thereby established. If permission be eventually given for the construction of the line the actual cost of all such surveys, as well as of those made at the cost of Government, may be included in the capital cost of the railway. No responsibility will be accepted by Government for the accuracy of any survey, plan, estimate, or other information supplied.
 - (5) The branch railway may be constructed by the main line administration, and will be maintained and worked by that administration, during the full currency of the contract to be entered into for the purpose, at a fixed ratio of expenses to earnings in each half-year. The ratio will, when the branch railway is of the same gauge as that of the working railway, usually be that obtaining on the whole system as from time to time existing,

* These will now be made by the Railway Board.

APPENDIX 41—*contd.*

including the branch railways, but will not exceed 50 per cent. of the gross earnings of the branch from all sources, and will be inclusive of charges for the use of the main line rolling-stock.

(6) Such expenses on account of the Board of Direction of the branch line railway company as may be incurred with the sanction of the Secretary may be charged—

(a) during construction to the capital account of the branch line company ;

(b) after opening, and until the minimum dividend under paragraph 2 (vi) (a) or (b) is received by the branch line company, as part of the working expenses to be met out of the stipulated percentage of the earnings of the branch taken by the working railway ; and

(c) thereafter out of the general receipts of the branch line Company.

(7) Railway materials for the branch railway will be carried over State lines at the special rates prescribed for such materials belonging to State railways.

4. The Government of India reserve the right to purchase all such branch railways at the expiry of 21 years or at subsequent intervals of 10 years on 12 months' notice, the purchase price being 25 times the yearly average net earnings, not including rebate payments of the three years preceding the purchase, with a maximum price of 120 and a minimum of 100 per cent. of cost price on a rupee basis.

5. The Government also reserve—

(i) the right to fix and vary from time to time the classification of goods, and maximum and minimum rates for each class of goods, as well as of passengers ; and

(ii) a general control in respect to the number and timing of trains.

6. Applications for concessions to construct branch railways under the terms of this resolution should be submitted in the form prescribed by memorandum A hereto attached, to the address of the Secretary to the Government of India, Public Works Department*.

7. Applications for fresh surveys to be carried out on the terms detailed in condition 3 (4) above should be submitted in the manner prescribed by Memorandum B hereto attached, to the address of the Secretary to the Government of India, Public Works Department*.

The Governments of Madras, Bombay, Bengal, the North-Western Provinces and Oudh and the Punjab.

The Chief Commissioners of the Central Provinces, Burma and Assam.

The Resident at Hyderabad.

The Resident in Mysore.

The Agents to the Governor General in Central India, Rajputana and Baluchistan.

The Consulting Engineers to the Government of India for Railways, Calcutta, Lucknow and Assam.

The Accountant General, Public Works Department.

ORDER.—Ordered that this resolution be forwarded for information to the Local Governments and Administrations and to the Officers marginally noted.

Also that it be published for general information in the *Gazette of India*.

W. S. S. BISSET, Col., R. E.,

Secretary to the Government of India.

Documents accompanying.

Enclosure No. 1.—Memorandum A for the guidance of persons or syndicates desirous of submitting proposals for the construction of branch or feeder railways, with form A and Appendices A, B and C.

Enclosure No. 2.—Memorandum B for the guidance of persons or syndicates desirous of having surveys made for branch or feeder lines of railway at their expense by the Public Works Department.

* Such applications should now be addressed to the Railway Board.

APPENDIX 41—contd.

Enclosure No. 1 (with Form A and Appendices A, B and C) to Government of India resolution No. 514 R. C. of 1896.

MEMORANDUM A.

For the guidance of persons or syndicates desirous of submitting proposals for the construction of branch railways in India forming feeders either to State lines worked by the State or to railways worked by companies.

1. All applications for leave to construct a branch or feeder railway in any part of British India are to be addressed to the Secretary to the Government of India, Public Works Department.*

2. All such applications shall be printed, and shall be drawn up, as far as may be, in form A attached hereto, and shall specify—

- (a) the company, person or syndicate by whom the application is preferred; the proposed amount of capital, the number of shares, and the amount of each share;
- (b) all the termini, together with the names of all the principal towns from, through, into, or near which the railway is intended to be constructed, as well as the names of each civil division and district to be traversed by the proposed alignment;
- (c) the length, so far as known, of the proposed railway;
- (d) the gauge, the weight of rails, etc.;
- (e) the motive power to be employed;
- (f) the maximum tolls, rates, and fares proposed to be charged on the projected railway;
- (g) the proposals for working the railway when constructed; and if any agreement is under contemplation, or has been provisionally arranged with any existing railway administration under which the proposed line, when constructed, is to be leased out for working by such railway administration, the exact nature and terms of such agreement;
- (h) any further information that may be required to enable Government to thoroughly understand the scope of the proposals.

3. Every such application shall be accompanied by a map to a scale of one mile to one inch, with the line of the proposed railway delineated thereon, so as to show its general course and direction, and also by an estimate as correct as may be of the works proposed to be authorised.

4. When the applicants draw up their own detailed plans and estimates these documents are invariably to be prepared in strict accordance with the rules for the preparation of railway projects issued under the authority of the Government of India, of which copies may be obtained on payment from the Superintendent of Government Printing, Calcutta.

5. Lists will be published from time to time of the branch railways forming feeders, whether to State lines worked by the State or to railways worked by companies, for the construction of which the Government of India are prepared to receive tenders. Copies of such lists can be obtained on application addressed to the Secretary to the Government of India, Public Works Department.*

6. Upon written application to the Director of Railway Construction permission will also be accorded to inspect, at all reasonable hours, the detailed plans, sections and estimates at the disposal of Government in regard to any particular route already surveyed, provided that they relate to branch railways, the construction of which the Government is prepared to entrust to companies; and copies of such plans, sections, and estimates will be furnished on payment of the cost of copying.

7. But in regard to all such information, statistics, plans, sections, or estimates, which may be furnished, it is to be recognised that the information thus offered to any person interested in the matter is simply the best information of the kind at the disposal of Government, and that Government cannot accept any responsibility whatever in regard to the accuracy of any of the documents.

* Such applications should now be addressed to the Railway Board.

APPENDIX 41.—contd.

Form A.

To accompany all applications for leave to construct a branch or feeder railway in any part of British India.

Nature of particulars to be specified.	Particulars.
1 The name of the company, person, or persons by whom the application is preferred; the proposed amount of capital, the number of shares, and the amount of each share.	
2 The termini, together with the names of all the principal towns from, in, through, or into, or near which the railway is intended to be constructed.	<i>Reference to an appendix (vide appendix A) may be here given, if necessary.</i>
3 The length, as far as known, of the proposed railway.	
4 The gauge proposed and weight of rails, etc.	
5 The motive power to be employed.	
6 The maximum tolls, rates, and fares, intended to be charged on the proposed railway.	<i>Reference to an appendix (vide appendix B) may be here given, if necessary.</i>
7 Details of any agreement which may have been provisionally arranged, or which it is desired to enter into, under which the proposed line, when constructed, is to be leased out for working to any existing railway administration.	<i>Reference to an appendix (vide appendix C) may be here given, if necessary.</i>
8 Any further information that may be required to enable the Government of India to thoroughly understand the scope of the proposals.	

APPENDIX 41.—contd.

Appendix B.

Schedule of maximum and minimum rates and fares intended to be charged on the proposed branch railway.

	Maximum. Pies per mile.	Minimum, Pies per mile.
<i>Passenger fares—</i>		
1st class . . . . .	...	...
2nd class . . . . .	...	...
Intermediate class . . . . .	...	...
3rd or lowest class . . . . .	...	...
	Maximum. Pies per maund per mile.	Minimum, Pies per maund per mile.
<i>Luggage</i> . . . . .	...	...
	Maximum, Pies per mile.	Minimum, Pies per mile.
<i>Carriages—</i>		
Single carriage . . . . .	...	...
	Maximum, Pies per truck.	Minimum, Pies per truck.
Two or more carriages on one truck . . . . .	...	...
	Maximum, Pies per mile.	Minimum, Pies per mile.
<i>Horses—</i>		
Single horse . . . . .	...	...
	Maximum, Pies per 50 miles or portion thereof.	Minimum, Pies per 50 miles or portion thereof.
<i>Dogs—</i>		
Each . . . . .	...	...
	First 100 miles. Annas.	Every additional 100 miles. Annas.
<i>Parcels—</i>		
Not exceeding 5 seers or 1 cubic foot . . . . .	...	...
„ „ 10 „ 2 cubic feet . . . . .	...	...
„ „ 20 „ 4 „ „ . . . . .	...	...
„ „ 30 „ 6 „ „ . . . . .	...	...
„ „ 40 „ 8 „ „ . . . . .	...	...
For every additional 10 seers or 2 cubic feet or portion of 10 seers or 2 cubic feet . . . . .	...	...
	Maximum, Pies per maund per mile.	Minimum, Pies per maund per mile.
<i>Goods rates—</i>		
5th class . . . . .	...	...
4th „ . . . . .	...	...
3rd „ . . . . .	...	...
2nd „ . . . . .	...	...
1st „ . . . . .	...	...
Coal, edible grain, and other low-priced staples to be carried at special rates . . . . .	...	...

APPENDIX 41.—*contd.*

Appendix C.

Working of proposed branch railway.

No agreement has yet been arranged with any existing railway administration under which the projected branch railway is to be worked ; but when completed, it is proposed to offer the working to the _____ Railway Company on the following terms :—

(i) _____

(ii) _____

(iii), etc., _____

APPENDIX 11—contd.

Or

It has been provisionally arranged with the _____ Railway Company to work the projected branch railway, when completed, on the following terms:—

(i) _____

(ii) _____

(iii), etc., _____

APPENDIX 41—concl'd.

Enclosure No. 2 to Government of India resolution No. 514 R. C. of 1896.

MEMORANDUM B.

For the guidance of persons or syndicates desirous of having surveys for branch or feeder lines of railway in India carried out at their expense by the Public Works Department*.

1. All applications for the survey of proposed branch or feeder railway routes in any part of British India are to be addressed to the Secretary to the Government of India, Public Works Department.†

2. All such applications shall specify—

- (a) the company, persons, or syndicate by whom the application is preferred ;
- (b) all the termini, together with the names of all the principal towns from, through, into, or near which the survey is intended to be carried, as well as the names of each civil division and district to be traversed by the proposed alignment ;
- (c) the length, so far as known, of the proposed railway ;
- (d) the gauge and the motive power to be employed ;
- (e) the intentions of the applicants as to the construction and working of the railway. If it is intended that the working shall be leased to any existing railway administration, the nature of the contemplated agreement shall be specified.

3. Every such application shall be accompanied by a map to a scale of one mile to one inch, with the line of the proposed survey delineated thereon, so as to show its general course and direction.

4. If the detailed plans and estimates are submitted to Government, these documents are invariably to be prepared in strict accordance with the rules for the preparation of railway projects issued under the authority of the Government of India, of which copies may be obtained on payment from the Superintendent of Government Printing, Calcutta.

5. Upon written application to the Director of Railway Construction permission will also be accorded to inspect at all reasonable hours the detailed plans, sections, and estimates, at the disposal of Government in regard to any particular route already surveyed, provided that they relate to branch or feeder railways the construction of which the Government is prepared to entrust to companies ; and copies of such plans, sections and estimates will be furnished on payment of the cost of copying.

6. But in regard to all such information, statistics, plans, sections, or estimates, which may be furnished, it is to be recognised that the information thus offered to any person interested in the matter is simply the best information of the kind at the disposal of Government, and that Government cannot accept any responsibility whatever in regard to the accuracy of any of the documents.

* These will now be carried out by the Railway Board.

† Such applications should now be addressed to the Railway Board.

APPENDIX 42.

Communication between passengers and the guards and drivers of trains.

No. R. T. 351.
7.

RAILWAY BOARD.

To

THE SECRETARIES TO THE GOVERNMENTS OF MADRAS, BOMBAY AND BURMA, PUBLIC WORKS DEPARTMENT, RAILWAY BRANCH.

THE SECRETARIES TO THE GOVERNMENTS OF BENGAL, THE UNITED PROVINCES, AND EASTERN BENGAL AND ASSAM, PUBLIC WORKS DEPARTMENT.

THE HONOURABLE THE RESIDENT AT HYDERABAD.

THE HONOURABLE THE AGENT TO THE GOVERNOR-GENERAL FOR RAJPUTANA.

THE CONSULTING ENGINEERS TO THE GOVERNMENT OF INDIA FOR RAILWAYS, CALCUTTA AND LUCKNOW.

Simala, the 27th June 1906.

I am directed by the Railway Board to inform you that they have had under consideration the necessity for the provision of an effective means of communication between passengers and the guard and driver of the train, and after a very careful consideration they are of opinion that the type of such communication, which is now in general use in England, should be adopted on the railways in India.

2. The details of the type referred to will no doubt be entirely within the knowledge of the various railway administrations here, but a simple description of it is that—

A chain runs along both sides of the inside of each carriage just below the point where the roof meets the sides. The chain can be easily pulled by any passenger having need for so doing, and the effect of the chain being pulled is to open a small valve connected with the vacuum brake which simultaneously calls the attention of both the guard and driver by decreasing the vacuum and would in time stop the train by the application of the brakes. In addition to opening the valve above referred to, a disc at the outside corner of the carriage is actuated. The normal position of this disc is at right angles to the side of the carriage in a horizontal plane, that is edge on. When actuated by the pulling of the chain the disc revolves into a vertical position, and can be seen from either end of the train and locates the carriage from which the alarm has been given. The system has been found to work in England most satisfactorily and is, comparatively speaking, inexpensive.

3. The Railway Board have, therefore, given orders to the three State-worked railways, *viz.*, North-Western, Oudh and Rohilkhand, and Eastern Bengal, to at once apply this means of communication to all new and re-built stock for all classes of passengers, and in addition the communication will also be fitted to all existing stock of all classes as rapidly as possible.

4. It will be readily understood that in a matter of this kind uniformity, which also means interchangeability between all classes of stock of the same gauge, is a vital necessity and as the type of communication approved by the Board has stood the practical test of experience satisfactorily, they desire that the type shall be made universal so far as the railways in India are concerned.

APPENDIX 12—concl'd.

5. The Railway Board consider the provision of an effective means of communication between passengers and guards and drivers a matter that affects the safety of the public travelling by railways, and under Section 62, Chapter VI of the Indian Railways Act of 1890, they require all railways to adopt the above type of communication on all classes of their carriages now under construction or to be built either as additions or renewals, and that such type of communication be fitted to all existing carriages of all classes within two years from the date hereof.

No. R. T. ³⁵¹/₈, dated Simla, the 27th June 1906.

Copy forwarded to the Managers, North-Western, Oudh and Rohilkhand, and Eastern Bengal State Railways, for information and necessary action.

APPENDIX 43.

Rules for the design and inspection of Signalling and Interlocking.

No. R. S. 87—3.

RAILWAY BOARD.

1. THE CONSULTING ENGINEERS FOR RAILWAYS, MADRAS, BOMBAY AND BURMA.
2. THE CONSULTING ENGINEERS TO THE GOVERNMENT OF INDIA FOR RAILWAYS, CALCUTTA AND LUCKNOW.
3. THE MANAGERS, NORTH-WESTERN, OUDH AND ROHILKHAND AND EASTERN BENGAL STATE RAILWAYS.

Simla, the 17th August 1906.

With reference to correspondence ending with

Senior Govt. Inspector's No. 1506, dated	
your	No. 890, dated
Senior Govt. Inspector's No. 2404-70-C.R.,	
Senior Govt. Inspector's No. 1092, dated	
your	No. 381-T., dated

11th April 1905.
 2nd March 1905.
 dated 1st December 1905.
 6th March 1905.
 18th January 1905.

I am directed to forward herewith a set of rules for the design and inspection of Signalling and Interlocking, and to say that the object in compiling these rules is to guide signalling manufacturers in meeting the requirements of Railway Administrations and Government Inspectors in passing the installations put up for ensuring safety to traffic. These rules take the place of the orders which were issued in Director of Railway Construction's No. 251-R.S. dated 17th February 1902, and Rules referred to in questions 47 and 50 in Form IX mentioned in Chapter II, Section (2) of the Rules for the Inspector of Railways prior to opening.

2. I am accordingly to say that the Railway Board authorise their adoption and will take the opportunity to include them in the next edition of the Rules for Inspection of Railways prior to opening.

Documents accompanying.

Set of Rules referred to.

APPENDIX 43—contd.

SIGNALLING AND INTERLOCKING.

SECTION I.

The following conditions are essential to any system of interlocking.

1. It shall not be possible to lower conflicting signals, at the same time.
2. Warning Signals, Home Signals, Routing Signals, and Starting Signals, where provided, shall be interlocked with the points in the station, so that it shall not be possible to lower any such signal until—
 - (i) all points on the running road are properly set,
 - (ii) all facing points on the running road are locked by a lock fixed at the points,
 - (iii) all points giving access to the running road from sidings and goods lines are so set as to prevent the running road being fouled,
 - (iv) level crossing gates, if controlled, are locked across the roadway.
3. With reference to rule 2 above, the lowering of the Signal shall prevent—
 - (i) the position of any of the points or traps referred to being altered, or
 - (ii) any facing points or gates being unlocked, until the Signal is again put to danger.
4. When all signals are at "Danger," all points, which would be locked by the lowering of such signals, must be free for shunting purposes.
5. The arrangement of Facing Point Locks must be such that the points cannot be or become unlocked whilst a train is passing over them.
6. Facing Points which cannot be protected by trap switches from being burst trailing, must be detected each time the Home Signal is lowered.
7. It must be impossible to lower a Warner until all Main Line Signals in advance have first been lowered, the lowering of the Warner must back lock such signals except that when the Outer is worked from the points and the Warner from the cabin or platform, the Warner need not back lock the Outer.
8. When the Outer Signal is worked from the points and the Home Signal from the cabin or the platform, it shall not be possible to lower the Outer until the Home has been lowered, and the lowering of the Outer shall not back lock the Home. The arrangement must be such that when the Home is put back to danger the Outer shall be automatically returned to danger. Except that if desired, arrangements may be made to allow of the interlock between the Outer and Home Signals being released, under the control of the Station Master for the purpose of bringing a train up to the Home Signal.
9. Points and Facing Point Locks must be worked by rodding and not by wire or other flexible connection.
10. The normal position of every signal shall be at danger, except in the case of Calling-on arms, and no Signal shall be used unless it is constructed to stand at, or return to, the normal position in case of failure of any part of its connections.
11. The arrangement must be such that the control effected by the interlocking cannot be vitiated even if a signal wire be out of adjustment or forcibly stretched.
12. The locking in a lever frame must act as soon as a lever is moved, and release must not be effected until it reaches the end of its travel.
13. All Facing Points must be fitted with an efficient gauge tie bar at the nose of the switches and be provided with double stretcher bars.

APPENDIX 43—contd

SECTION II.

It is desirable that the following conditions should be complied with.

14. The design of a station yard should be such as shall, where possible, provide for the isolation of running roads from each other, and from all sidings and goods lines. But where the connection of sidings and goods lines with a running road is direct, and no other means, therefore, exists of denying access to such running roads to vehicles on a siding, traps must be provided on the siding and shall be treated as points as in rule 2 (iii) above. Such traps shall be protected by signals or indicators, and shall be fixed at a sufficient distance short of the fouling point, and in such a position as regards the side of the track on which they are fitted, as shall ensure that an engine or vehicle derailed at the trap shall not foul the running road. An efficient derailing scotch block shall be considered a trap for the purpose of this rule. For the purpose of this rule and of Rule 2 above all loops or lines which are not signalled for running trains shall be considered as sidings.

15. Except where *duly qualified* Cabinmen are employed the Station-Master must be provided with an efficient control, so that it shall be impossible for any signal controlling the movements of trains approaching or leaving the station, to be lowered without his consent and *co-operation*. In the case of crossing stations on Single Line no mechanical control shall be considered efficient unless it provides for the *independent* control of each of the Home Signals.

16. When Signals are fixed some distance in advance of Facing Points to which they refer, the arrangement should be such as to render it impossible, within reasonable limits, to put the Signal to Danger behind a train and then unlock the points before the train reaches them.

17. The *act* of putting the Warner to Danger must not release the trailing points at the far end of the station.

18. The *counterweights* of Signals should be fixed high up the post out of reach, unless the arrangement is such that the signal cannot be lowered by raising the counterweight.

19. Ordinary Facing Point Locks shall be provided with a treadle bar of greater length than the greatest distance between two consecutive pairs of wheels in a train. Such bars to rise level with the top of the rail in the case of inside treadle bars, and at least one inch above it in the case of outside bars, in the centre of the travel.

20. All Facing Points, the locks of which are actuated by separate levers and which are locked in *either* position, shall be provided with efficient detectors working in connection with the signals controlling trains running over such points in the facing direction. *

21. All Facing Points which are worked and locked by the same lever shall be provided with efficient detectors working in connection with the signals controlling trains running over such points in the facing direction.

22. When points are not locked from the place from which the signals are worked, the control by means of any detectors fitted to such points should extend to the locking arrangements as well as to the actuation of the points.

23. Except with the previous sanction of the Government Inspector, the following maximum distance at which points may be worked from the lever shall not be exceeded :—

Trailing Points, or Facing Points, worked by a separate lever	...	300 yards.
Facing Points worked and locked by the same lever	...	200 yards.

22. Rodding must be properly compensated in all cases where the lead exceeds 80 feet.

25. In the case of Key-locked Facing Points the locks shall be so placed as to be inaccessible during the passage of a train over them unless the

APPENDIX 43—*contd.*

arrangement is such that the key, being required for the release of the Signals, cannot be brought to the points when Signal is "Off" or for an appreciable time after it has been put to Danger.

* 26. Key locks where used must be connected to the track in such a manner as to ensure the necessary rigidity.

27. Important Signals should be fixed in such position, and at such height above rail-level, as will ensure their being *clearly seen* by Drivers, having regard to the nature of the background and relative height of Subsidiary Signals. Every Signal must, if possible, be visible from the Signal cabin or point from which it is worked, otherwise efficient *repeaters* should be provided.

28. All interlocking gear must be of strong and substantial construction. The apparatus must be such as can easily be maintained in an efficient condition under ordinary conditions of working.

SECTION III.

*Instructions regarding Signals and Interlocking gear generally.**Locking frames and cabins.*

29. The locking in a frame should be compactly arranged, and should not occupy such space in front of the levers as will prevent the cabinman having the best possible view of the railway, nor such space at the back as will prevent him standing well up to the levers. The locking should be easily got at for cleaning, lubricating, alterations or repairs, as far as possible without interfering with the working of the frame. There should be as few wearing parts as possible, and all parts should be interchangeable. The frame should not only be effective in working, but should be strong, durable, as simple as possible in construction and capable of extension if required.

30. The levers should be painted with distinguishing colours, and each lever in addition to its own number should bear the numbers of the levers which must precede it, in the proper order. In the case of tappet locking the arrangement must be such that no lock can enter a notch other than that for which it is intended. A sufficient number of spare levers should be provided.

31. When points and signals are worked from signal cabins, these should be at such height above rail level as will ensure the Signalman having a good view of the points and signals under all conditions.

32. The fixed lights in signal cabins should be screened off so as not to show in the direction of approaching trains.

33. Each signal cabin should be provided with a clock and with a proper diagram showing the arrangement of points and signals worked from the cabin in their normal position, with their numbers.

Signals.

34. Signals shall be used whenever and wherever they are ordered by special instructions.

* 35. Every Stop Signal shall be fixed at the point at which it is desired the train to which it refers shall stop.

36. A signal arm shall be placed on the left hand side of the post as seen by the Driver of an approaching train to which such signal refers.

37. Signals shall be fixed on the side of the line on which they can best be seen by Drivers of approaching trains, but the left hand side of the track is to be preferred unless the sighting is greatly interfered with.

38. Signal arms shall be painted red with a white bar on the side facing trains to which they refer, and white, with a black bar on the other side. On Warning Signals the bar is to be parallel with the notching.

39. Signal arms referring wholly to lines which are not used for passenger traffic may be distinguished by rings.

APPENDIX 13—contd.

40. Signal arms not in use shall be distinguished by having two crossed bars attached to them, and must remain fixed at Danger.

41. Where two or more lines diverge, the Signal shall be fixed on a bracket post.

42. Where two or more lines converge, the Signals shall, where possible, be fixed on separate posts.

43. But in both the above cases, where the number of Signals is considerable, they may be fixed on separate posts or dolls carried on a signal-bridge provided for the purpose.

44. In the case of all bracket or bridge signals, the left hand Signal shall refer to the left hand road, the second Signal from the left to the road next the left hand road, and so on.

45. Signals on brackets and bridges shall be distinguished as much as possible by *grouping* and by making the more important Signals *higher* than the less important.

46. Signals referring to parallel tracks should as far as possible be arranged in transverse line.

47. Signals should be so fixed that the distance between the lamps of adjacent Signals shall in no case be less than 6 feet, except in the case of platform starting, or other subsidiary Signals.

48. Not more than one Signal referring to trains moving in the same direction (whether on the same track or on separate tracks) shall be placed on the same post, unless—

(a) there be only two Signals on the post and the lower Signal is a Warner fixed from six to seven feet below the other Signal, or

(b) the lower Signal is a Co-acting Signal or Calling-on Signal fixed at least fifteen feet below the next Signal, or

(c) the sanction of the Government Inspector has been obtained.

49. Important Signals should ordinarily have the arm not less than 24 feet above rail-level, and should conform to the following minimum dimensions:—

(i) length of arm from spindle	...	...	...	4' 6"
(ii) width of arm	...	..	...	10"
(iii) diameter of front lens	...	...	...	5"

50. Platform or loop starting Signals, and subsidiary Signals generally shall have a *short* arm fixed, as a rule, not more than 18 feet above rail level.

51. Pulleys for wire must be of such construction that the wire cannot be jammed between the pulley and bracket.

52. Lofty Signals, or Signals in exposed situations, should be guyed; means for adjustment of guys should also be provided.

53. Signal connections should be of approved pattern galvanized strand or solid steel wire. The stakes for carrying wire should not be more than 36 feet apart. Junctions of wire with chain or shackles to be made with thimbles.

54. Every angle wheel should be provided with not less than 3' 6" of chain (not less than $\frac{1}{4}$ "), the ends of chains to be provided with split links.

55. Signal wires should be provided with adjusting screws, but where the lead exceeds 1,000 ft. an efficient regulator to be provided, placed so as to be within easy reach of the man working the signals.

56. Electric Signal Repeaters where provided should be of the three position type.

57. The Front lenses of subsidiary Signals, and the back lights of all Signals, are to be as small as possible consistent with efficiency.

APPENDIX 43—*contd.*

58. (1) Every fixed Signal, the light of which cannot be seen from the point from which the Signal is worked, must be provided with a back-light or tell-tale, by which the Station-Master may see whether the light is burning or not.

(2) Back-lights of Signals must show a small white light when "on" and no light at all in any other position.

(3) When a Warner is used by itself, its fixed green light must show a white back-light.

59. The lamps of all Signals should be fixed and ladders provided for lighting and cleaning them. Except under special instructions the front spectacle frame must be rigidly attached to, and work on the same spindle as the Signal arm.

60. Miniature and Dwarf Signals used to control shunting shall show the same front and back-lights as are prescribed for Signals, but front lenses shall not be more than 3" diameter or back lenses more than 1½" diameter.

61. Point indicators shall show a white light for the straight and green for the turn-out in both directions.

62. Point indicators used to protect and indicate the position of traps shall show a red light in front when the trap is open and green when it is closed; back-lights, white when the trap is open, green when the trap is closed.

Points.

63. Facing Points should be avoided as far as possible, but when they cannot be dispensed with they must be placed as near as practicable to the levers by which they are worked or locked.

64. Adjusting cranks should be used on the last connection to each pair of points Facing Point Lock, or other apparatus worked by rodding.

65. Travelling rollers of approved pattern should be used for all rodding connections and be fixed not less than 7 feet apart.

66. An adjusting screw or turnbuckle should be provided in each rod connection.

67. Where detectors are used it must not be possible for a detector slide to enter a notch other than that which it is intended for.

68. The keys used in key-locking should be of such a size as to minimise the chance of their being mislaid or broken.

SECTION IV.

Instructions for Government Inspectors.

When inspecting an interlocking installation, the Government Inspector must satisfy himself upon the following points:—

1. That the locking in the frame corresponds with that shown on the locking table.
2. That the diagram correctly represents the arrangement of the yard, especially as regards the normal position of points.
3. That before any Signal can be lowered, the running road to which it refers must be correctly made and locked, and that after the Signal has been lowered, no points or traps giving access to that road from sidings can be moved so as to allow the running road to be fouled.
4. That conflicting Signals cannot be lowered at the same time.
5. That all Signals are visible from the cabin or frame, or are provided with efficient repeaters.
6. That the Signaller has a good view of all points worked from his cabin.

APPENDIX 43—concl'd.

7. That Signals come fully ~~to~~ when lowered, and return freely to the danger position.
8. That when there are slotted or controlled Signals, the Signal can be returned to danger freely, by either of the levers by which it is controlled.
9. That in the case of a stop arm controlling a Warner below it, the Warner cannot be lowered unless the upper arm is "off," and that when the upper arm is put to danger the Warner, if "off" returns freely to danger, as well as the upper arm.
10. That Facing Point Locks are so set that the insertion of a $\frac{3}{16}$ inch rod between the switch and stock rails, 6 inches from the nose of the former, prevents the points being locked.
11. That Facing Point Lock Plungers when withdrawn, clear the Stretcher blade by not more than $\frac{1}{2}$ inch, and that the stroke of the plunger is not less than 6 inches.
12. That all switch and lock movements are adjusted to make full travel and require a lever to spring connections slightly before it is fully home.
13. That switches are adjusted to come tight against stock rail.
14. That when detectors are fitted each switch rail is detected independently either by separate detector blades or by means of a floating lever. Except that where a Facing Point Lock locks each switch independently separate detector blades are not necessary.
15. That treadle bars are of proper length as laid down in the rules given above, and rise to the full height in the centre of the travel.
16. That all cranks, locks, detectors, compensators, wheels, etc., are securely fixed to substantial bases fixed in concrete or attached to the sleepers.
17. That rod rollers are attached to timber cast-iron or stone blocks, or branches, let sufficiently into the ground to secure the necessary rigidity.
18. That leading off gear of cabins is securely fixed to heavy timber, or concrete.
19. That proper rules or instructions are provided for working.
20. No Interlocking Installation shall be passed by a Government Inspector unless the conditions laid down in Section I are fully complied with. But *unrestricted* speed through stations should not be allowed unless the conditions specified in Section II are complied with as well. It will be open to the Government Inspector to impose a restriction, if he judges it to be necessary, in cases where any of the Rules laid down in Section III have not been complied with.

